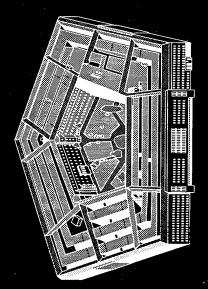
PROGRAMS (R-





Department of Defense Budget for Fiscal Year 1999

February 1998

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Preface

The RDT&E Programs (R-1) is derived from and consistent with the Budget Review System database.

transmittal of the President's Budget. This document is also provided to OASD (PA) for use by non-DoD The R-1 is provided annually to the DoD oversight committees of the Congress coincident with the activities, and is available to the public on the Internet at http://www.dtic.mil/comptroller.

Office of the Under Secretary of Defense (Comptroller)

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TABLE OF CONTENTS

DoD Component Summary

Army

Army Summary Army R-1 Detail

Navy

Navy Summary Navy R-1 Detail

Air Force
Air Force Summary
Air Force R-1 Detail

Defense Agencies
Defensewide Summary
Defensewide R-1 Detail

Developmental Test and Evaluation Summary Developmental Test and Evaluation R-1 Detail

Operational Test and Evaluation Summary Operational Test and Evaluation R-1 Detail

Individual Defense Agency R-1 Detail

PAGE

П%П

A-I A-1 through A-10

N-1 through N-10

F-1 through F-12

D-I & D-II D-1 through D-9 D-10 D-11 D-12 D-13

D-14 through D-35

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Department of Defense FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998	Thousands of Dollars	
Summary		

	FY 1997	FY 1998	FY 1999
Summary By Appropriation			
Research Development Test & Eval Army	4,915,915	5,025,279	4,780,545
Research Development Test & Eval Navy	7,884,361	7,879,912	8,108,923
Research Development Test & Eval AF	14,089,834	13,982,255	13,598,093
Research Development Test & Eval Defwide	9,312,589	9,496,233	9,314,665
Developmental Test & Eval, Defense	275,792	245,725	251,106
Operational Test & Evaluation, Defense	24,219	29,794	25,245
Total Research, Development, Test & Evaluation	36,502,710	36,659,198	36,078,577

ΙΙ Page

Department of Defense FY 1999 RDT&E Program

Summary

Exhibit R-1

Date: FEB 1998

		Thousands o	of Dollars
	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities			
Basic Research	1,031,920	1,041,839	1,111.227
Applied Research	2,821,792	2,996,042	3,019,851
Advanced Technology Development	3,639,059	3,762,352	3,050,193
Demonstration and Validation	5,864,080	6,396,570	6,516,243
Engineering and Manufacturing Development	8,536,124	8,199,157	7,986,551
RDT&E Management Support	3,464,876	3,198,994	2,770,676
Operational Systems Development	11,144,859	11,064,244	11,623,836
Total Research, Development, Test & Evaluation	36,502,710	36,659,198	36,078,577
Summary Recap of FYDP Programs			
Strategic Forces	114,878	129,638	225.275
General Purpose Forces	2,899,197	2,817,559	2,951,190
Intelligence and Communications	7,750,423	7,669,906	7,768,334
Mobility Forces	79,466	121,201	182,614
Research and Development	25,240,665	25,474,965	24,463,667
Central Supply and Maintenance	240,299	215,245	278,332
Training Medical and Other	1,778	1,258	
Administration and Assoc Activities	24,850	38,633	41,148
Support of Other Nations	9,523	37,907	12,114
	141,631	152,886	155,903
Total Research, Development, Test & Evaluation	36,502,710	36,659,198	36,078,577

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Page III

Department of the Army FY 1999 RDT&E Program

Exhibit R-1

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MINS	Summary	Date: FEB 1998	866
		Thousands of Dollars	Dollars
	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities			
Basic Research	174,763	180,643	200,760
Applied Research	541,944	654,051	511,285
Advanced Technology Development Demonstration and Walidation	653, 525	657,518	483,595
Engineering and Manufacturing Development	139,607	362,811 1 163 405	466,009
RDIAE Management Support	1,144,658	1,129,057	1,076,593
Operational Systems Development	715,889	678,794	773,179
	1 1 1 1 1 1 1		
Total Research Development Test & Eval Army	4,915,915	5,025,279	4,780,545
Summary Recap of FYDP Programs			
Strategic Forces	25,680	33,011	103,937
General Purpose Forces	512,499	451,291	450,086
Intelligence and Communications	70,983	83,818	161,996
Assertan and Development	4,261,515	4,382,656	4,027,610
Central Supply and Maintenance Administration and Assoc Activities	45,006	64,278	30,511
Support of Other Nations		10,225	6,405
Total Research Development Test & Eval Army	4,915,915	5,025,279	4,780,545

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Department of the Army FY 1999, RDT&E Program

Þ 29,746 U 16,249 U 25,180 U 27,981 U 40,107 U 5,116 U 5,229 U Þ 000'9 10,137 U 18,738 U 11,685 U 31,115 U 200,760 22,329 FY 1999 14,902 137,399 48,459 29,489 19,157 Thousands of Dollars Date: FEB 1998 Exhibit R-1 7,018 24,238 3,577 9,000 FY 1998 25,855 18,925 20,339 60,162 40,042 29,905 16,712 13,678 45,138 180,643 12,415 22,211 24,464 121,827 4,388 23,756 7,796 14,845 2,193 20,637 28,677 39,248 2,987 19,140 34,272 20,993 16,935 14,108 117,041 43,614 174,763 14,339 20,107 FY 1997 Act ન Chemical, Smoke and Equipment Defeating Technolog Appropriation: 2040 A Research Development Test & Eval Army University and Industry Research Centers In-House Laboratory Independent Research Combat Vehicle and Automotive Technology Sensors and Electronic Survivability Modeling and Simulation Technology Electronics and Electronic Devices Joint Service Small Arms Program Weapons and Munitions Technology Defense Research Sciences Night Vision Technology Ballistics Technology Materials Technology Aviation Technology Missile Technology EW Technology TRACTOR ROSE TRACTOR HIP Basic Research 0602105A 0602303A 0602308A 0602601A 0602618A 0602705A 0602709A 0601101A 0601102A 0601104A 0602104A 0602120A 0602122A 0602211A 0602270A 0602622A 0602623A 0602624A Program Element Number Line 17 7 10 18 Ŋ 9 7 ω σ 디 12 13 14 15 16 4

Department of the Army FY 1999 RDT&E Program

Þ 19,746 U 37,488 U 18,661 U 67,255 U 1,164 U 20,000 U 32,969 U Þ Þ 10,715 2,185 FY 1999 13,369 13,842 8,602 11,012 30,048 511,285 Thousands of Dollars Date: FEB 1998 Exhibit R-1 8,736 FY 1998 56,131 1,205 89,467 10,272 16,197 50,802 18,088 160,376 654,051 34,361 176,737 6,419 50,019 9,196 7,052 37,505 2,122 54,901 FY 1997 15,781 13,893 23,513 106,131 541,944 23,211 195,884 Act N N ~ N Command, Control, Communications Technology Appropriation: 2040 A Research Development Test & Eval Army ARMY Artificial Intelligence Technology Manpower/Personnel/Training Technology Human Factors Engineering Technology Environmental Quality Technology Computer and Software Technology Military Engineering Technology Warfighter Advanced Technology Dual Use Applications Program Aviation Advanced Technology Medical Advanced Technology Warfighter Technology Countermine Systems Medical Technology Item Applied Research 0603001A 0602712A 0602789A 0602716A 0602720A 0602782A 0602805A 0603002A 0603003A 0602783A 0602784A 0602785A 0602786A 0602787A Program Line Element No Number 13 20 22 23 24 25 21 27 28 31 32

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Page A-2

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Technology
Manpower, Personnel and Training Advanced
Technology

Command, Control, Communications Advanced

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24,555 54,435 20,109

25,444 40,796

27,661 28,160 29,627

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Combat Vehicle and Automotive Advanced Technology

Weapons and Munitions Advanced Technology

0603004A 0603005A 0603006A 0603007A

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Department of the Army FY 1999 RDT&E Program

Exhibit R-1

Appr	Appropriation: 2	2040 A Research Development Test & Eval Army			Date: FEB 1998	86
					Thousands of Dollar	
1.1	Frogram Flement		! ! !	! ! ! !		S 4
No		Item	Act	FY 1997	FY 1998	FY 1999 C
37	0603009A	TRACTOR HIKE	ĸ	16,123	13,441	9,873 U
38	0603013A	TRACTOR DIRT	ю	2,679		57 U
39	0603017A	TRACTOR RED	ю	8,221	5,399	4,590 U
40	0603020A	TRACTOR ROSE	æ	4,845	10,859	2,016 U
41	0603105A	Military HIV Research	m	17,080	2,629	5,710 U
42	0603238A	Global Surveillance/Air Defense/Precision Strike	m	19,291	12,773	9,973 U
43	0603270A	rechnology Demonstn EW Technology	ю	6,480	7,929	11,508 U
44	0603313A	Missile and Rocket Advanced Technology	т	93,739	90,468	п 960'98
45	0603322A	TRACTOR CAGE	ю	6,123	5,991	4,408 U
46	0603606A	Landmine Warfare and Barrier Advanced Technology	т	26,899	31,581	21,944 U
47	0603607A	Joint Service Small Arms Program	m	8,825	9,015	5,173 U
48	0603654A	Line-Of-Sight Technology Demonstration	m	9,533	4,845	20,099 U
49	0603710A	Night Vision Advanced Technology	m	28,584	18,705	23,960 U
20	0603734A	Military Engineering Advanced Technology	m	19,678	19,574	13,564 U
51	0603772A	Advanced Tactical Computer Science and Sensor	m	21,692	18,886	18,456 U
52	0603780A	rechnology Tactical Towed Array Sonar (H)	ĸ			54,419 U
53	0604280A	Joint Tactical Radio	ю		10,000	15,600 U
	Advanced	Advanced Technology Development		653,525	657,518	483,595
54	0603018A	TRACTOR TREAD	4	2,267		Ð

Department of the Army FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998	
Eval Army	
2040 A Research Development Test & Eval Army	
Appropriation:	

Program	= 1		İ	; ; ; ; ; ; ; ;	Thousands of Dollars	Dollars
Number		Item	Act	FY 1997	FY 1998	FY 1999 c
0603308A Army	Army	Army Missile Defense Systems Integration	4	68,205	73,304	12,240 U
0603619A Land	Land	Landmine Warfare and Barrier - Adv Dev	4	27,164	24,299	6,778 U
0603627A Smol	Smo]	Smoke, Obscurant and Target Defeating Sys-Adv Dev	4	5,573		Þ
.0603639A Arm	Arm	Armament Enhancement Initiative	4	56,687	37,127	26,526 U
0603640A Art	Art	Artillery Propellant Development	4	8,103	8,258	D
0603645A Arm	Arm	Armored System Modernization - Adv Dev	4	1,612	1,945	n
0603649A Eng	Eng	Engineer Mobility Equipment Advanced Development	4	498		n
0603653A Adv	Adv	Advanced Tank Armament System (ATAS)	4	11,144	8,704	8,928 U
0603713A Arm	Arn	Army Data Distribution System	4	25,699	20,526	17,281 U
0603745A Tac	Tac	Tactical Electronic Support Systems - Adv Dev	4	3,837		D
0603747A Sol	Sol	Soldier Support and Survivability	4	6,487	7,324	7,581 U
0603766A Tac	Tac	Tactical Electronic Surveillance System - Adv Dev	4	24,714	19,566	D
0603774A Nic	Nic	Night Vision Systems Advanced Development	4	2,254	2,848	2,681 U
0603790A NAT	NA	NATO Research and Development	4	9,495	8,866	11,161 U
0603801A Avi	Avi	Aviation - Adv Dev	4	10,648	13,696	7,487 U
0603804A Loc	Log	Logistics and Engineer Equipment - Adv Dev	4	7,100	6,574	17,478 U
0603805A Con	Con	Combat Service Support Control System Evaluation	4	15,479	7,280	14,353 U
0603807A Med	Med	Medical Systems - Adv Dev	4	9,730	6,555	11,414 U
0603851A TR	TR	TRACTOR CAGE (Dem/Val)	4	2,922	1,851	п 996
0603854A Art	Art	Artillery Systems - Dem/Val	4	232,288	314,017	313,166 U

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Department of the Army FY 1999 RDT&E Program

Exhibit R-1

Appr	opriation:	Appropriation: 2040 A Research Development Test & Eval Army			Date: FEB 1998	
1		, , , , , , , , , , , , , , , , , , ,			Thousands of	of Dollars
Line No	Flogram Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
75	0603856A	SCAMP Block II Dem/Val	4	7,701	71	л 696'L
	Demonstra	Demonstration and Validation		539,607	562,811	466,009
16	0604201A	Aircraft Avionics	S	17,706	31,660	7,878 U
77	0604220A	Armed, Deployable OH-58D	5	1,100		n
78	0604223A	Comanche	ĸ	325,299	272,187	367,823 U
79	0604270A	EW Development	2	69,067	84,180	N 686'58
80	0604321A	All Source Analysis System	2	37,463	26,094	28,081 U
81	0604325A	Follow-on to TOW	2	5,934	13,449	48,106 U
82	0604328A	TRACTOR CAGE	2	1,484	11	1,788 U
83	0604604A	Medium Tactical Vehicles	2	5,719	3,614	D
84	0604609A	Smoke, Obscurant and Target Defeating Sys-Eng Dev	2			106 U
85	0604611A	JAVELIN	2	5,855	7,771	5,277 U
86	0604619A	Landmine Warfare	2	25,355	19,189	23,189 U
87	0604622A	Family of Heavy Tactical Vehicles	2	4,906	4,845	D
88	0604633A	Air Traffic Control	2	7,086	4,533	1,737 U
89	0604640A	Advanced Command and Control Vehicle (AC2V)	ហ	7,545	10,532	D
90	0604641A	Tactical Unmanned Ground Vehicle (TUGV)	2	2,728	2,604	2,468 U
91	0604642A	Light Tactical Wheeled Vehicles	2	3,409		D
92	0604645A	Armored Systems Modernization (ASM)-Eng. Dev.	ហ	6,408		4,500 U

Department of the Army

Exhibit R-1	Date: FEB 1998
FY 1999 RDT&E Program	Appropriation: 2040 A Research Development Test & Eval Army

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Department of the Army FY 1999 RDI&E Program

Went of the Army Exhibit R-1 RDT&E Program

Appr	Appropriation: 2	2040 A Research Development Test & Eval Army			Date: FEB 1998	86
: : :			1 1 1 1 1 1 1		Thousands of Dollars	
Line No	Frogram Element Number	Item	Act	σ.	FY 1998	
113	0604808A	Landmine Warfare/Barrier - Eng Dev	Ŋ	9,342	13,818	46,905 U
114	0604814A	Sense and Destroy Armament Missile - Eng Dev	S	677	10,847	20,813 U
115	0604816A	LONGBOW - Eng Dev	Ŋ	10,762		D
116	0604817A	Combat Identification	Ŋ	16,889	19,026	13,471 U
117	0604818A	Army Tactical Command & Control Hardware &	S	35,495	19,184	32,929 U
118	0604820A	Sortware Radar Development	ß			2,786 U
119	0604823A	Firefinder	Ŋ	2,430	2,484	19,822 U
120	0604824A	DUAP Commercial Operations and Support Savings	Ŋ			33,600 U
121	0604854A	Artillery Systems - EMD	ហ			100 U
	Engineeri	Engineering and Manufacturing Development		1,145,529	1,162,405	1,269,124
122	0604256A	Threat Simulator Development	9	11,146	16,480	11,935 U
123	0604258A	Target Systems Development	9	9,661	11,328	13,127 U
124	0604759A	Major T&E Investment	9	39,698	39,200	40,284 U
125	0605103A	Rand Arroyo Center	9	20,550	16,534	16,718 U
126	0605301A	Army Kwajalein Atoll .	9	140,078	120,918	142,710 U
127	0605326A	Concepts Experimentation Program	9			17,441 U
128	0605502A	Small Business Innovative Research	9	99,082		D
129	0605601A	Army Test Ranges and Facilities	ø	128,036	118,327	119,553 U
130	0605602A	Army Technical Test Instrumentation and Targets	9	20,761	32,160	33,439 U

Department of the Army FY 1999 RDI&E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Appro	Appropriation:	2040 A Research Development Test & Eval Army			Date: FEB 1998	860
	Program				Thousands of	Dollars
Line No		Item	Act	FY 1997	FY 1998	FY 1999 C
131	0605604A	Survivability/Lethality Analysis	9	29,362	31,308	30,498 U
132	0605605A	DOD High Energy Laser Test Facility	9	29,227	28,965	15,022 U
133	0605606A	Aircraft Certification	9	2,415	2,828	2,924 U
134	0605702A	Meteorological Support to RDT&E Activities	9	6,278	6,235	6,691 U
135	0605706A	Materiel Systems Analysis	9	14,006	27,755	9,711 U
136	0605709A	Exploitation of Foreign Items	9	6,962	7,523	4,031 U
137	0605712A	Support of Operational Testing	9	44,900	76,807	66,320 U
138	0605716A	Army Evaluation Center	9			25,526 U
139	0605801A	Programwide Activities	9	58,310	79,626	64,588 U
140	0605802A	International Cooperative Research and Developmen	9	1,494		D
141	0605803A	Technical Information Activities	vo	16,465	14,673	16,251 U
142	0605805A	Munitions Standardization, Effectiveness and	9	3,083	11,064	8,497 U
143	0605853A	Salety Environmental Conservation	9	1,874	1,723	3,195 U
144	0605854A	Pollution Prevention	9	13,413	5,187	8,694 U
145	0605856A	Environmental Compliance	9	52,716	56,576	44,116 U
146	0605876A	Minor Construction (RPM) - RDT&E	9	4,148	4,258	4,205 U
147	0605878A	Maintenance and Repair (RPM) - RDT&E	9	698'99	83,751	49,233 U
148	0605879A	Real Property Services (RPS) - RDT&E	9	88,190	86,199	87,172 U
149	0605896A	Base Operations - RDT&E	9	217,667	224,593	230,029 п
150	0605898A	Management Headquarters (Research and Development	9	18,035	25,039	4,683 U
151	0909998A	Financing for Cancelled Account Adjustments	9	232		Ð
	RDT&E Mane	RDT&E Management Support		1,144,658	1,129,057	1,076,593
		UNCLASSIFIED	FIED			Page A-8

Exhibit R-1 Department of the Army FY 1999 RDT&E Program

Appr	Appropriation:	2040 A Research Development Test & Eval Army			Date: FEB 1998	
	Program				Thousands of Dollars	ollars
Line No		Item	Act	FY 1997	FY 1998	FY 1999 C
152	0603778A	MLRS Product Improvement Program	7	61,721	36,171	20,244 U
153	0102419A	Aerostat Joint Project Office	7	25,680	33,011	103,937 U
154	0203726A	Adv Field Artillery Tactical Data System	7	37,507	37,455	35,111 U
155	0203735A	Combat Vehicle Improvement Programs	7	203,653	161,497	94,756 U
156	0203740A	Maneuver Control System	7	27,166	24,510	28,923 U
157	0203744A	Aircraft Modifications/Product Improvement	7	21,836	21,567	26,681 U
158	0203752A	Aircraft Engine Component Improvement Program	7	3,734	2,849	2,948 U
159	0203758A	Digitization	7	98,124	94,103	45,007 U
160	0203759A	Force XXI Battle Command, Brigade and Below	7			52,469 U
161	0203761A	Force Twenty-One (XXI), Warfighting Rapid	7	16,640	43,126	99,528 U
162	0203801A	Missile/Air Defense Product Improvement Program	7	60,882	30,443	11,252 U
163	0203802A	Other Missile Product Improvement Programs	7	13,570	1,216	1,248 U
164	0203806A	TRACTOR RUT	7	3,030	2,046	D
165	0203808A	TRACTOR CARD	7	6,588	6,373	з,993 п
166	0208010A	Joint Tactical Communications Program (TRI-TAC)	7	17,747	21,105	35,941 U
167	0208053A	Joint Tactical Ground System	7	2,022	5,001	12,229 U
168	0301359A	Special Army Program	7	10,929	7,315	6,537 U
169	0303140A	Information Systems Security Program	7	3,048	11,771	7,433 U
170	0303142A	SATCOM Ground Environment (SPACE)	7	37,665	48,939	53,897 U
171	0303150A	WWMCCS/Global Command and Control System	7	18,877	14,581	17,543 U

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Exhibit R-1 Department of the Army FY 1999 RDT&E Program

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122	,	"Fricking that the search Development Test & Eval Army		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date: FEB 1998	866
Line	Program Line Element		!		Thousands of Dollars	Dollars
No	Number	Item	Act	FY 1997	FY 1998	EY 1999 C
172	0305114A	Traffic Control, Approach and Landing System-FY	7		728	D
173	0305128A	Security and Investigative Activities	7	464	484	950 U
174	0305204A	Tactical Unmanned Aerial Vehicles	7			75.636 11
175	0708045A	End Item Industrial Preparedness Activities	7	45,006	64,278	30.511 11
176	1001018A	NATO Joint STARS	7		10,225	6,405 U
	Operationa	Operational Systems Development		715,889	678,794	773,179
Total		Research Development Test & Eval Army		4,915,915	5,025,279	4,780,545

Page A-10

Department of the Navy FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998	Thousands of Dollars	FY 1998 FY 1999		338,743 362,679				348 2,063,281		,383 1,722,183		,912 8,108,923		68,757 98,520	6		ý	,369 129,027			,912 8,108,923
Date:	Thousar	FY 1		338,	493,	514,	2,219,	2,227,348	551,	1,535,383		7,879,912		89	892,	521,	6,344,529	53,		1 1 1 1 1 1 1	7,879,912
1		FY 1997		345,606	514,282	462,002	1,904,375	2,153,911	681,340	1,822,845	1 1 1 1 1 1 1 1 1 1	7,884,361		59,970	1,034,986	643,652	6,052,594	84,237	8,922		7,884,361
Summary																					
			Summary Recap of Budget Activities	Basic Research	Applied Research	Advanced Technology Development	Demonstration and Validation	Engineering and Manufacturing Development	RDÍ&E Management Support	Operational Systems Development		Total Research Development Test & Eval Navy	Summary Recap of FYDP Programs	Strategic Forces	General Purpose Forces	Intelligence and Communications	Research and Development	Central Supply and Maintenance	Administration and Assoc Activities		Total Research Development Test & Eval Navy

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Department of the Navy FY 1999 RDT&E Program

Exhibit R-1

4,699 U 65,033 U Þ Þ D 14,734 U 37,140 U 43,177 U 23,229 U 12,132 U 347,945 U S-----29,722 77,617 23,849 50,619 45,928 FY 1999 362,679 Thousands of Dollars Date: FEB 1998 38,079 44,578 54,814 70,174 21,164 41,451 FY 1998 14,248 338,743 28,379 48,865 24,553 13,458 324,495 44,442 14,175 345,606 21,931 16,016 53,967 85,881 18,274 32,112 48,790 49,837 FY 1997 331,431 Act 7 N ~ ~ a a ~ ~ Materials, Electronics and Computer Technology Historically Black Colleges and Universities Air and Surface Launched Weapons Technology Appropriation: 1319 N Research Development Test & Eval Navy Undersea Warfare Surveillance Technology In-House Laboratory Independent Research Ship, Submarine & Logistics Technology Marine Corps Landing Force Technology Communications, Command and Control, Electronic Warfare Technology Defense Research Sciences Human Systems Technology Aircraft Technology Item Basic Research 0602111N 0602122N 0602234N 0601152N 0602121N 0602232N 0602233N 0602270N 0602314N 0601153N 0602131M 0602228N Program Element Number Н 7 4 11 12 Line m œ σ 10 N_O

Page N-1

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Air Systems and Weapons Advanced Technology

Applied Research

0603217N

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493,622

514,282

34,856 U 20,000 U

36,616

31,413

56,722

71,491

70,661

40,958

Mine Countermeasures, Mining and Special Warfare

0602315N 0602435N

13 14

Oceanographic and Atmospheric Technology

Undersea Warfare Weaponry Technology

0602633N

15 16

0602805N

Dual Use Applications Program

Department of the Navy FY 1999 RDT&E Program

Date: FEB 1998 Exhibit R-1 Appropriation: 1319 N Research Development Test & Eval Navy

	Program				Thousands of Dollars	1 1
Line No		Item	Act	Y 19	FY 1998	FY 1999 C
18	0603238N	Precision Strike and Air Defense Technology	m	61,610	54,319	58,306 U
19	0603270N	Advanced Electronic Warfare Technology	ъ	14,072	16,635	17,169 U
20	0603508N	Surface Ship & Submarine HM&E Advanced Technology	m	31,064	48,261	39,264 U
21	0603640M	Marine Corps Advanced Technology Demonstration	ю	19,646	58,780	41,931 U
22	0603706N	Medical Development	ю	55,593	68,151	18,728 U
23	0603707N	Manpower, Personnel and Training Adv Tech Dev	ю	18,002	21,834	21,042 U
24	0603712N	Environmental Quality and Logistics Advanced	ю	37,701	25,462	20,919 U
25	0603747N	Indersea Warfare Advanced Technology	ю	45,697	44,772	56,827 U
26	0603782N	Mine and Expeditionary Warfare Advanced Technolog	м	40,847	36,876	41,710 U
27	0603792N	Advanced Technology Transition	ю	69,110	83,510	74,392 U
28	0603794N	C3 Advanced Technology	m	31,790	21,619	22,294 U
	Advanced	Advanced Technology Development		462,002	514,781	460,725
29	0603207N	Air/Ocean Tactical Applications	4	17,265	15,499	28,824 U
30	0603208N	Training System Aircraft	4	1,963		Þ
31	0603216N	Aviation Survivability	4	12,237	16,447	8,164 U
32	0603254N	ASW Systems Development	4	20,682	23,962	20,184 U
33	0603261N	Tactical Airborne Reconnaissance	4	27,497	10,262	1,479 U
34	0603382N	Advanced Combat Systems Technology	4	3,685	5,077	8,653 U
35	0603502N	Surface and Shallow Water Mine Countermeasures	4	82,210	71,146	73,491 U

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Exhibit R-1

Department of the Navy FY 1999 RDT&E Program

Þ 7,595 154,307 3,600 4,676 118,342 58,419 27,725 11,055 60,520 14,900 42,668 9,654 39,775 FY 1999 117,094 122,031 104,822 68,402 11,871 Thousands of Dollars Date: FEB 1998 6,840 9,388 2,940 7,379 60,087 5,491 4,007 15,713 52,084 FY 1998 19,976 22,022 113,659 110,618 131,501 121,639 46,324 37,236 68,186 2,729 5,107 17,404 9,462 3,453 4,296 15,761 5,672 599 36,549 89,956 61,679 14,356 64,459 142,165 24,255 FY 1997 13,555 129,571 36,261 8,131 Act Ship Preliminary Design & Feasibility Studies Advanced Submarine Combat Systems Development Appropriation: 1319 N Research Development Test & Eval Navy Shipboard System Component Development Advanced Submarine System Development Advanced Warhead Development (MK-50) Submarine Tactical Warfare Systems Advanced Surface Machinery Systems Advanced Nuclear Power Systems Marine Corps Assault Vehicles Surface Ship Torpedo Defense Ship Concept Advanced Design Carrier Systems Development Ship Combat Survivability Combat System Integration Conventional Munitions Radiological Control RETRACT JUNIPER Item CHALK EAGLE Surface ASW PILOT FISH 0603504N 0603506N 0603513N 0603514N 0603542N 0603512N 0603525N 0603536N 0603553N 0603561N 0603562N 0603563N 0603564N 0603570N 0603573N 0603576N 0603582N N603E090 0603611M Program Element Number Line No 52 53 54 37 38 39 40 41 42 43 44 45 46 20 51 47 48 49

UNCLASSIFIED

Department of the Navy FY 1999 RDT&E Program

Exhibit R-1

Appro	Appropriation:	1319 N Research Development Test & Eval Navy			Date: FEB 1998	
	Program				Thousands of I	Dollars
Line No		Item	Act	FY 1997	FY 1998	FY 1999 C
56	0603612M	Marine Corps Mine/Countermeasures Systems - Adv	4	H		1,958 U
57	0603635M	Dev Marine Corps Ground Combat/Support System	4	40,542	40,357	37,133 U
58	0603654N	Joint Service Explosive Ordnance Development	4	6,580	10,301	10,756 U
59	0603658N	Cooperative Engagement	4		206,851	131,623 U
09	0603711N	Fleet Tactical Development	4	3,167		D
61	0603713N	Ocean Engineering Technology Development	4	8,002	10,283	15,257 U
62	0603721N	Environmental Protection	4	47,882	52,685	59,438 U
63	0603724N	Navy Energy Program	4	3,899	4,037	4,592 U
64	0603725N	Facilities Improvement	4	2,124	6,521	1,861 U
65	0603734N	CHALK CORAL	4	74,293	90,562	97,552 U
99	0603746N	RETRACT MAPLE	4	79,167	115,179	117,186 U
67	0603748N	LINK PLUMERIA	4	34,971	28,266	22,123 U
68	0603751N	RETRACT ELM	4	24,984	23,577	11,665 U
69	0603755N	Ship Self Defense - Dem/Wal	4	267,344	9,597	12,337 U
70	0603785N	Combat Systems Oceanographic Performance	4	12,887	11,332	Þ
71	0603787N	Assessment Special Processes	4	88,428	78,209	81,743 U
72	0603790N	NATO Research and Development	4	9,381	9,672	11,004 U
73	0603795N	Land Attack Technology	4	52,595	58,998	110,104 U
74	0603800N	Joint Strike Fighter (JSF) - Dem/Val	4	243,286	449,674	463,402 U
75	0603851M	Nonlethal Weapons - Dem/Val	4		16,290	22,592 U

UNCLASSIFIED

Department of the Navy FY 1999 RDT&E Program

Date: FEB 1998 Exhibit R-1 Appropriation: 1319 N Research Development Test & Eval Navy

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Line No	Frogram Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
16	0603852N	Arsenal Ship	4	27,317		Ω
77	0603860N	Joint Precision Approach and Landing Systems	4		2,894	Þ
78	0603889N	Counterdrug RDT&E Projects	4	20,027		Þ
79	0604327N	Hard and Deeply Buried Target Defeat System	4		4,839	9,827 U
80	0604707N	Space and Electronic Warfare (SEW) Architecture/ Engineering Support	4	6,539	8,395	17,955 U
	Demonstrat	Demonstration and Validation		1,904,375	2,219,002	2,358,359
81	0603208N	Training System Aircraft	S		391	D 565
82	0603266N	AH-1T Composite Rotor Blade (H)	2	68,087		D
83	0604212N	Other Helo Development	2	63,218	124,877	231,120 U
84	0604214N	AV-8B Aircraft - Eng Dev	2	15,801	10,689	13,787 U
85	0604215N	Standards Development	2	24,917	36,804	51,987 U
86	0604217N	S-3 Weapon System Improvement	2	8,010	2,097	31,469 U
87	0604218N	Air/Ocean Equipment Engineering	S	5,204	5,898	6,162 U
88	0604221N	P-3 Modernization Program	S	7,525	12,728	3,046 U
83	0604231N	Tactical Command System	2	29,049	41,631	50,713 U
90	0604245N	H-1 Upgrades	2		83,608	98,542 U
91	0604261N	Acoustic Search Sensors	S.	13,657	18,315	29,637 U
92	0604262N	V-22A	2	605,641	512,139	355,142 U
93	0604264N	Air Crew Systems Development	ស	25,596	17,366	9,454 U

Department of the Navy FY 1999 RDI&E Program

Exhibit R-1

Appro	Appropriation: 1	1319 N Research Development Test & Eval Navy		I	Date: FEB 1998	
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au i i	Program Element		•		 	က စ
No		Item	Act	FY 1997	FY 1998	FY 1999 c
94	0604270N	EW Development	Ŋ	117,809	95,646	128,586 U
95	0604307N	Surface Combatant Combat System Engineering	Ŋ	85,334	118,543	132,561 U
96	0604310N	Arsenal Ship	ß		13,462	D
97	0604311N	LPD-17 Class Systems Integration	S	4,251	13,944	1,343 U
98	0604312N	Tri-Service Standoff Attack Missile	S		3,794	2,064 U
66	0604355N	Vertical Launch ASROC	2		8,733	Þ
100	0604366N	Standard Missile Improvements	5	9,199	523	1,320 U
101	0604373N	Airborne MCM	S	30,432	17,905	24,967 U
102	0604503N	SSN-688 and Trident Modernization	Ŋ	56,922	56,024	50,300 U
103	0604504N	Air Control	ß	12,513	8,947	4,198 U
104	0604507N	Enhanced Modular Signal Processor	Ŋ	20,733	2,370	1,599 U
105	0604512N	Shipboard Aviation Systems	ស	9,710	8,931	8,531 U
106	0604516N	Ship Survivability	വ	3,826	2,900	0,196 U
107	0604518N	Combat Information Center Conversion	ស	9,574	10,943	4,704 U
108	0604524N	Submarine Combat System	ĸ	17,543	17,745	11,710 U
109	0604528N	SWATH (Small Waterplane Area Twin Hull)	ഹ		45,000	D
110	0604558N	New Design SSN	ß	362,413	307,749	218,816 U
111	0604561N	SSN-21 Developments	S.	70,687	50,307	27,456 U
112	0604562N	Submarine Tactical Warfare System	ស	21,460	43,066	28,573 U
113	0604567N	Ship Contract Design/ Live Fire T&E	S	2,728	89,516	133,645 U

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Department of the Navy FY 1999 RDI&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 1319 N Research Development Test & Eval Navy

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	Program		ļ		Thousands of	Dollars
Line No		Item	Act	FY 1997	FY 1998	EY 1999 C
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114	0604574N	Navy Tactical Computer Resources	5	27,500	33,862	8,249 U
115	0604601N	Mine Development	2	2,371	2,270	15 U
116	0604603N	Unguided Conventional Air-Launched Weapons	S.	30,333	28,020	5,183 U
117	0604610N	Lightweight Torpedo Development	ıs	11,517	18,615	8,106 U
118	0604612M	Marine Corps Mine Countermeasures Systems - Eng	5	3,813	912	3,855 U
119	0604618N	Joint Direct Attack Munition	ß	30,047	12,003	11,738 U
120	0604651M	Nonlethal Weapons - EMD	2	9,326		Þ
121	0604654N	Joint Service Explosive Ordnance Development	ស	5,609	6,416	7,037 U
122	0604703N	Personnel, Training, Simulation, and Human Factor	S	754	992	1,235 U
123	0604710N	Navy Energy Program	S	1,903	2,873	5,544 U
124	0604721N	Battle Group Passive Horizon Extension System	2	5,199	4,382	5,770 U
125	0604727N	Joint Standoff Weapon Systems	2	82,267	77,977	73,022 U
126	0604755N	Ship Self Defense - EMD	S	134,751	157,971	148,165 U
127	0604771N	Medical Development	S	3,173	16,418	4,321 U
128	0604777N	Navigation/ID System	5	49,054	37,460	42,301 U
129	0604784N	Distributed Surveillance System	2	54,455	41,586	42,017 U
130	0604805N	Commercial Operations and Support Savings	2			28,500 U
	Engineerir	Engineering and Manufacturing Development		2,153,911	2,227,348	2,063,281
131	0604256N	Threat Simulator Development	9	22,060	12,479	24,400 U

Department of the Navy

Exhibit R-1	
FY 1999 RDT&E Program	

Page N-8

Department of the Navy FY 1999 RDT&E Program

Exhibit R-1

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Appropriation:	

	Exhibit	
Department of the Navy	FY 1999 RDT&E Program	

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Appro		N Research Development Test & Eval			Date: FEB 1998	
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Line No	Program Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
170	0206313M	Marine Corps Communications Systems	7	53,960	40,840	50,594 U
171	0206623M	Marine Corps Ground Combat/Supporting Arms System	7	9,557	13,699	14,699 U
172	0206624M	Marine Corps Combat Services Support	7	7,993	4,857	4,634 U
173	0207161N	Tactical AIM Missiles	7	45,319	57,946	65,855 U
174	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	7	2,128	5,479	4,862 U
175	0301303N	Maritime Intelligence	7			
176	0301327N	Technical Reconnaissance and Surveillance	7			
177	0303109N	Satellite Communications (SPACE)	7	32,000	16,256	18,188 U
178	0303140N	Information Systems Security Program	7	22,388	16,773	22,201 U
179	0303150N	WWMCCS/Global Command and Control System	7		484	469 U
180	0304111N	Special Activities	7			
181	0305154N	Defense Airborne Reconnaissance Program	7	7,929		D
182	0305160N	Defense Meteorological Satellite Program (SPACE)	7	16,735	4,753	11,671 U
183	0305188N	Joint C4ISR Battle Center (JBC)	7			5,352 U
184	0305192N	Joint Military Intelligence Programs	7		2,341	2,302 U
185	0305207N	Manned Reconnaissance Systems	7		334	342 U
186	0305927N	Naval Space Surveillance	7	629	387	n 668
187	0702207N	Depot Maintenance (Non-IF)	7			D 196'69
188	0708011N	Industrial Preparedness	7	84,237	53,369	29,060 U
	Operational	al Systems Development		1,822,845	1,535,383	1,722,183
Total		Research Development Test & Eval Navy		7,884,361	7,879,912	8,108,923 Page N-10
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Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Summary	ary	Date: FEB 1998	1998
		Thousands of Dollars	f Dollars
	FY 1997	FY 1998	FY 1999
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Jummary Recap of Budget Activities			
Basic Research	182.082	196 251	2000
Applied Research	635,453	567.810	582,593
Advanced Technology Development	452,832	425,844	379.318
Funine String and Validation	835,385	1,068,821	1,282,962
Physical and manufacturing Development	4,520,549	4,152,773	3,751,014
Operational Gretone Benefit	1,052,866	1,019,415	554,349
operacional Systems Development	6,410,667	6,551,341	6,839,032
Total Becerach Doses comment many and the	1111111	1 1 1 1 1 1 1	
rocar Acscarcii Development Test & Eval AF	14,089,834	13,982,255	13,598,093
Summary Recap of FYDP Programs			
Strategic Forces	900	c c	
General Purpose Forces	077'67	0/8//7	22,818
Intelligence and Communications	1,325,137	1,447,271	1,562,755
Mobility Forces	5,028,014	4,990,824	4,971,526
Research and Develorment	79,466	121,201	182,614
Control Charles and Mainten	7,498,235	7,288,279	6,755,309
The ining Modian and Maintenance	104,955	71,585	92,563
Administration and Other	1,778	1,258	•
Support of Other Watiers	13,498	6,285	6,756
Support of other mations	9,523	27,682	3,752
#0+21 B0000000 100000	1	1 1 1 1 1 1	
local Research Development Test & Eval AF	14,089,834	13,982,255	13,598,093

Page F-I

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Department of the Air Force FY 1999 RDT&E Program

		Department of the Air Force FY 1999 RDT&E program	or the Alr DT&E Progr	Force am	Exhibit R-1	
Appr	Appropriation:	3600 F Research Development Test & Eval AF			Date: FEB 19	
	Program				Thousands of	of Dollars
Line						2
No	Number	Item	Act	FY 1997	FY 1998	FY 1999 C
Н	. 0601102F	Defense Research Sciences	н	182,082	196,251	209,395 U
	Basic Research	earch		182,082	196,251	209,395
2	0602102F	Materials	73	75,448	68,339	62,578 U
ю	0602201F	Aerospace Flight Dynamics	7	62,507	57,446	64,932 U
4	0602202F	Armstrong Lab Exploratory Development	7	86,404	72,118	60,805 U
5	0602203F	Aerospace Propulsion	7	68,860	57,261	69,061 U
9	0602204F	Aerospace Avionics	7	63,953	61,025	65,549 U
7	0602269F	Hypersonic Technology Program	7	986'6	9,305	16,649 U
ω	0602601F	Phillips Lab Exploratory Development	8	138,483	118,266	116,139 U
6	0602602F	Conventional Munitions	7	39,222	38,505	41,529 U
10	0602702F	Command Control and Communications	7	90,590	84,545	65,175 U
11	0602805F	Dual Use Applications Program	7			19,606 U
	Applied Research	esearch		635,453	567,810	582,023
12	0603106F	Logistics Systems Technology	ю	17,059	14,502	В,677 и
13	0603108F	Integrated Data Systems	ю		18,541	Þ
14	0603112F	Advanced Materials for Weapon Systems	ю	23,524	26,503	21,006 U
15	0603202F	Aerospace Propulsion Subsystems Integration	m	23,919	23,378	30,814 U
16	0603203F	Advanced Avionics for Aerospace Vehicles	m	28,240	25,077	26,442 U
17	0603205F	Flight Vehicle Technology	m	8,734	5,441	7,035 U

Page F-1

Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Appro	Appropriation: 3	3600 F Research Development Test & Eval AF			Date: FEB 19	1998
	Drogram		ļ		Thousands of	of Dollars
Line		Item	Act	FY 1997	FY 1998	FY 1999 C
18	0603211F	Aerospace Structures	ю	9,398	9,734	12,494 U
19	0603216F	Aerospace Propulsion and Power Technology	ю	34,464	33,126	38,984 U
20	0603227F	Personnel, Training and Simulation Technology	m	6,928	5,668	6,636 U
21	0603231F	Crew Systems and Personnel Protection Technology	т	22,191	24,881	16,603 U
22	0603238F	Global Surveillance and Communication Technology	т	2,180		D
23	0603245F	Flight Vehicle Technology Integration	т	5,948	6,062	7,674 U
24	0603253F	Advanced Avionics Integration	т	14,107	12,012	10,536 U
25	0603270F	Electronic Combat Technology	т	26,133	32,540	25,553 U
26	0603302F	Space and Missile Rocket Propulsion	т	22,137	17,249	21,121 U
27	0603311F	Ballistic Missile Technology	т	3,253	7,537	D
28	0603401F	Advanced Spacecraft Technology	т	72,925	54,899	42,571 U
29	0603410F	Space Systems Environmental Interactions	м	2,528	3,012	3,457 U
30	0603601F	rechnology Conventional Weapons Technology	ю	25,279	21,622	23,244 U
31	0603605F	Advanced Weapons Technology	٣	55,467	50,832	40,153 U
32	0603707F	Weather Systems Technology	٣	3,175	1,943	1,568 U
33	0603723F	Environmental Engineering Technology	ю	7,412	3,786	2,663 U
34	0603726F	C3I Subsystem Integration	e	8,167	9,364	11,025 U
35	0603728F	Advanced Computing Technology	ю	7,558	5,270	7,827 U
36	0603789F	C3 Advanced Development	٣	9,103	12,865	13,235 U
37	0305176F	Combat Survivor Evader Locator	m	13,003		D
	Advanced	Advanced Technology Development		452,832	425,844	379,318
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Exhibit R-1 Department of the Air Force FY 1999 RDT&E Program

Appro	op:	3600 F Research Development Test & Eval AF			Date: FEB 1998	86
! !					Thousands of Dollars	
Line No	Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
38	0603260F	Intelligence Advanced Development	4	4,478	4,489	4,615 U
39	0603319F	Airborne Laser Program	4	56,037	151,439	292,219 U
40	0603430F	Advanced MILSATCOM (SPACE)	4	32,403	38,307	54,413 U
41	0603432F	Polar Adjunct (SPACE)	4	59,439	14,511	41,508 U
42	0603434F	National Polar-orbiting Operational Environmental	4	27,622	31,438	64,732 U
43	0603441F	Space Based Infrared Architecture (SPACE) - Dem	4	252,492	202,433	160,262 U
44	0603617F	Command, Control, and Communication Applications	4	3,992	7,232	7,770 U
45	0603742F	Combat Identification Technology	4	1,936	1,276	6,177 U
46	0603790F	NATO Research and Development(H)	4	9,767	10,414	11,117 U
47	0603800F	Joint Strike Fighter	4	251,626	432,277	456,137 U
48	0603851F	Intercontinental Ballistic Missile - Dem/Val	4	45,961	46,372	29,360 U
49	0603852F	C-130J - Dem/Val	4		3,741	D
50	0603853F	Evolved Expendable Launch Vehicle Program (SPACE)	4	44,263	60,437	n
51	0603854F	Global Broadcast Service	4	33,094	54,089	70,147 U
52	0603855F	Space Architect Office	4	10,939		n
53	0603856F	Air Force/NRO Partnership (AFNP)	4			17,645 U
54	0603860F	Joint Precision Approach and Landing Systems	4			22,057 U
55	0603876F	Space-Based Laser	4			35,000 U
56	0604237F	Variable Stability In-Flight Simulator Test	4	1,336	5,650	D
57	0604327F	Hard and Deeply Buried Target Defeat System	4		4,716	D 808'6
	Demonstration and	tion and Validation		835,385	1,068,821	1,282,962
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Exhibit R-1 Department of the Air Force FY 1999 RDT&E Program

Appro	Appropriation:	3600 F Research Development Test & Eval AF	1 1 1 1 1			86
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No	Element Number	Item	Act	FY 1997	FY 1998	EY 1999 C
28	0604201F	Integrated Avionics Planning and Development	ιΩ	14,202	15,406	10,762 U
59	0604218F	Engine Model Derivative Program (EMDP)	Ŋ	1,474	701	Ω
9	0604222F	Nuclear Weapons Support	5	6,124	4,456	4,977 U
61	0604226F	B-1B	ις	207,386	208,222	195,385 U
62	0604227F	Training Systems Development	S	4,241	4,061	1,961 U
63	0604233F	Specialized Undergraduate Pilot Training	Ŋ	63,975	67,866	55,563 U
64	0604239F	F-22 EMD	S	1,888,985	1,958,915	1,582,217 U
65	0604240F	B-2 Advanced Technology Bomber	Ŋ	585,612	335,254	131,247 U
99	0604243F	Manpower, Personnel and Training Development	S	4,132	4,112	n
67	0604270F	EW Development	S.	93,797	75,700	90,126 U
89	0604321F	Combat Intelligence System -EMD	Ŋ	2,786		D
69	0604441F	Space Based Infrared System (SBIRS) High EMD	Ŋ	193,018	316,467	538,438 U
70	0604442F	Space Based Infrared System (SBIRS) Low EMD	ស			33,328 U
71	0604479F	Milstar LDR/MDR Satellite Communications (SPACE)	Ŋ	659,656	628,027	550,940 U
72	0604480F	Global Positioning System Block IIF (SPACE)	Ŋ	36,426	66,918	62,591 U
73	0604600F	Munitions Dispenser Development	r ₂	46,142	17,519	7,559 U
74	0604602F	Armament/Ordnance Development	ഹ	3,477	1,511	12,037 U
75	0604604F	Submunitions	ഗ	4,761	4,748	4,805 U
97	0604611F	Joint Standoff Land Attack Missile (JSLAM)	ហ		40,622	Þ
77	0604617F	Air Base Operability	S.	2,776	1,260	2,503 U

Page F-4

Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Appro	••	3600 F Research Development Test & Eval AF			Date: FEB 1998	
: 	Drogram		 		Thousands of Dollar	Dollars
Line No	Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
78	0604618F	Joint Direct Attack Munition	ស	32,932	21,896	12,204 U
79	0604703F	Aeromedical/Chemical Defense Systems	ស	4,498	3,907	3,336 U
80	0604706F	Life Support Systems	ιΩ	10,289	4,301	3,744 U
81	0604708F	Civil, Fire, Environmental, Shelter Engineering	ις	2,613	2,526	2,715 U
82	0604711F	Systems Survivability (Nuclear Effects)	S	35		Þ
83	0604727F	Joint Standoff Weapons Systems	2	22,039	21,992	15,134 U
84	0604735F	Combat Training Ranges	Ŋ	26,490	19,131	14,581 U
85	0604740F	Computer Resource Technology Transition (CRTT)	5	1,805	4,157	200 U
86	0604750F	Intelligence Equipment	ហ	1,013	1,223	1,300 U
87	0604754F	Joint Tactical Information Distribution System	Ŋ	29,127	7,374	7,956 U
88	0604762F	Common Low Observables Verification System	S			4,901 U
89	0604770F	Joint Surveillance/Target Attack Radar System	2	206,130		n
90	0604779F	4	ις	4,697	4,972	5,823 U
91	0604805F	Control Systems Commercial Operations and Support Savings	ις			27,937 U
92	0604851F	Intercontinental Ballistic Missile - EMD	2	199,219	143,913	81,546 U
93	0604853F	Evolved Expendable Launch Vehicle Program (SPACE)	2		26,572	280,297 U
94	0605011F	RDT&E for Aging Aircraft	5			4,901 U
98	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	ഗ	160,692	123,460	Þ
96	0207414F	Combat Intelligence System	ιΩ		11,590	Þ
97	0305176F	Combat Survivor Evader Locator	ις		3,994	Þ
	Engineerin	Engineering and Manufacturing Development		4,520,549	4,152,773	3,751,014
		INCLASSIFIED	FIED			Page F-5

Department of the Air Force FY 1999 RDI&E Program

Exhibit R-1

Appr	Appropriation:	3600 F Research Development Test & Eval AF			Date: FEB 1998	86
	Program		: : : : : :	:	Thousands of Dollars	-
Line			;			S
No	Number	Item	Act	FY 1997	FY 1998	FY 1999 c
86	0603402F	Space Test Program (SPACE)	9	46,367	38,696	D
66	0604256F	Threat Simulator Development	9	56,456	51,501	32,582 U
100	0604258F	Target Systems Development	9	4,626	4,491	1,666 U
101	0604759F	Major T&E Investment	9	29,440	53,364	34,518 U
102	0605101F	RAND Project Air Force	9	21,236	18,370	21,168 U
103	0605306F	Ranch Hand II Epidemiology Study	9	8,827	10,285	4,408 U
104	0605502F	Small Business Innovation Research	9	212,854	208,848	Ω
105	0605704F	Theater Air Defense BMC4I	9	11,990		Þ
106	0605712F	Initial Operational Test & Evaluation	ø	21,744	27,153	24,541 U
107	0605807F	Test and Evaluation Support	9	413,892	372,496	370,168 U
108	0605808F	Development Planning	9	6,401	4,270	6,075 U
109	0605853F	Environmental Conservation	9	10,412	11,276	Þ
110	0605854F	Pollution Prevention	v	19,723	9,251	1,673 U
111	0605856F	Environmental Compliance	9	21,829	16,159	Þ
112	0605860F	Rocket Systems Launch Program (SPACE)	v	32,165	26,348	7,865 U
113	0605864F	Space Test Program (STP)	9			45,933 U
114	0605876F	Minor Construction (RPM) - RDI&E	9		1,792	Þ
115	0605878F	Maintenance and Repair (RPM) - RDT&E	v		50,301	Þ
116	0605879F	Real Property Services (RPS) - RDT&E	v		47,994	Þ
117	0605896F	Base Operations - RDT&E	9	127,667	63,229	Þ

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Department of the Air Force FY 1999 RDIKE Program

		Department of the Air Force FY 1999 RDI&E Program	the Air E Progra	Force	Exhibit R-1	
Appro	opriation:	Appropriation: 3600 F Research Development Test & Eval AF			Date: FEB 19	1998
	Program				Thousands of	Dollars
Line	Element Number	Item	Act	FY 1997	FY 1998	FY 1999 c
118	0909900F	Financing for Expired Account Adjustments	9	7,237		Þ
119	1001004F	International Activities	9		3,591	з,752 и
	RDT&E Mane	RDT&E Management Support		1,052,866	1,019,415	554,349
120	0101113F	B-52 Squadrons	7	10,594	3,235	6,436 U
121	0101120F	Advanced Cruise Missile	7	1,105	2,314	D
122	0102325F	Joint Surveillance System	7	3,654	1,831	2,175 U
123	.0102326F	Region/Sector Operation Control Center	7	8,921	19,233	13,592 U
124	0102411F	North Atlantic Defense System	7	4,954	1,257	615 U
125	0207131F	A-10 Squadrons	7			2,312 U
126	0207133F	F-16 Squadrons	7	125,489	95,333	125,076 U
127	0207134F	F-15E Squadrons	7	152,353	129,774	104,207 U
128	0207136F	Manned Destructive Suppression	7	13,130	12,259	2,443 U
129	0207141F	F-117A Squadrons	7	11,777	8,964	5,147 U
130	0207161F	Tactical AIM Missiles	7	29,245	51,199	52,966 U
131	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	7	9,704	39,875	45,078 U
132	0207217F	Podded Reconnaissance System	7	6,127	282	D
133	0207247F	AF TENCAP	7	18,172	14,233	6,447 U
134	0207248F	Special Evaluation Program	7	34,922	69,162	92,551 U
135	0207268F	Aircraft Engine Component Improvement Program	7	92,636	98,058	92,069 U

Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Appro	Appropriation:	3600 F Research Development Test & Eval AF			Date: FEB 1998	
	DYCOT				Thousands of 1	Dollars
Line		Item	Act	FY 1997	FY 1998	FY 1999 C
136	0207320F	Sensor Fused Weapons	7	18,664	16,437	3,551 U
137	0207323F	AGM-86C Conventional Air-Launched Cruise Missile	7	1,722		n
138	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	7			132,870 U
139	0207412F	Theater Air Control Systems	7	589	377	431 U
140	0207414F	Combat Intelligence System	7		,	9,802 U
141	0207417F	Airborne Warning and Control System (AWACS)	7	55,004	43,606	28,189 U
142	0207419F	Tactical Airborne Command and Control Systems	7	7.1		D
143	0207423F	Advanced Communications Systems	7	1,646	2,728	2,348 U
144	0207424F	Evaluation and Analysis Program	7	75,534	68,353	84,950 U
145	0207431F	Combat Air Intelligence System Activities	7	7,373		D
146	0207433F	Advanced Program Technology	7	68,210	93,902	74,707 U
147	0207438F	Theater Battle Management (TBM) C4I	7	32,712	24,778	27,292 U
148	0207440F	Tactical Air Control System for Counternarcotics	7	1,245		n
149	0207581F	Joint Surveillance and Target Attack Radar System	7		118,335	123,793 U
150	0207590F	Seek Eagle	7	13,550	16,909	17,590 U
151	0207591F	Advanced Program Evaluation	7	180,983	209,935	272,914 U
152	0207601F	USAF Modeling and Simulation	7	25,505	19,807	14,899 U
153	0207605F	Wargaming and Simulation Centers	7			5,287 U
154	0208006F	Mission Planning Systems	7	17,606	14,747	17,090 U
155	0208019F	Tactical Information Program (TIP)	7			10,685 п

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Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Þ Þ 1,470 U Þ Þ Þ 1,234 4,233 8,420 FY 1999 31,057 113,040 61,119 18,595 1,241 15,641 39,230 1,375 17,973 2,352 13,675 Thousands of Dollars Date: FEB 1998 874 8,794 9,961 7,588 FY 1998 1,299 26,873 96,922 38,074 1,816 32,399 4,961 19,745 6,741 11,450 38,989 1,273 670 21,740 3,160 30,08 7,295 FY 1997 107,804 23,307 6,667 14,943 7,277 21,752 39,689 Act 7 7 7 War Reserve Materiel - Equipment/Secondary Items World-Wide Military Command and Control Systems E-4B National Airborne Operations Center (NAOC) Defense Satellite Communications System (SPACE) Milstar Satellite Communications System (SPACE) Minimum Essential Emergency Communications Appropriation: 3600 F Research Development Test & Eval AF Missile and Space Technical Collection Information Systems Security Program War Reserve Materiel - Ammunition Global Command and Control System Global Combat Support System Management Headquarters GDIP Information Warfare Support Technical Evaluation System Foreign Technology Division Joint Spectrum Center (JSC) Special Evaluation System Theater Missile Defenses Special Activities FOREST GREEN Item 0208021F 0208030F 0208031F 0208060F 0208160F 0208161F 0301310F 0301315F 0301324F 0301398F 0302015F 0303110F 0303131F 0303140F 0303144F 0303141F 0303150F 0303152F 0303601F 0304111F Program Element Number Line No 156 157 158 159 160 161 162 163 164 165 166 167 169 175 168 170 171 173 174

Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Appro	Appropriation:	3600 F Research Development Test & Eval AF	! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date: FEB 1998	86
	Program				Thousands of Dollars	Dollars
Line	Element Number	Item	Act	FY 1997	FY 1998	EY 1999 C
176	0304311F	Selected Activities	7		2,902	3,000 U
177	0305099F	Global Air Traffic Management (GATM)	7			27,056 U
178	0305110F	Satellite Control Network (SPACE)	7	67,804	73,496	56,622 U
179	0305111F	Weather Service	7	4,801	8,411	10,649 U
180	0305114F	Air Traffic Control, Approach, and Landing System	7	7,337	5,928	4,729 U
181	0305119F	Medium Launch Vehicles (SPACE)	7	10,999	5,130	7,375 U
182	0305128F	Security and Investigative Activities	7	275	3,325	458 U
183	0305137F	National Airspace System (NAS) Plan	7	11,818	11,917	1,881 U
184	0305138F	Inertial Upper Stage (IUS)	7	1,505	3,150	558 U
185	0305142F	Applied Technology and Integration	7			
186	0305144F	Titan Space Launch Vehicles (SPACE)	7	77,702	70,483	87,443 U
187	0305145F	Arms Control Implementation	7	27,795		D
188	0305154F	Defense Airborne Reconnaissance Program	7	4,742		D
189	0305158F	Tactical Terminal	7	2,794	243	237 U
190	0305160F	Defense Meteorological Satellite Program (SPACE)	7	17,618	12,425	20,432 U
191	0305164F	NAVSTAR Global Positioning System (User	7	33,760	43,627	67,238 U
192	0305165F	G	7	40,875	25,146	21,155 U
193	0305172F	Control Segments Combined Advanced Applications	7			
194	0305182F	Eastern Space Launch Facility (ESLF) (SPACE)	7	33,900	32,018	24,578 U
195	0305205F	Endurance Unmanned Aerial Vehicles	7		14,147	4,307 U

Page F-10

Department of the Air Force FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 3600 F Research Development Test & Eval AF

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	Drogram			;	Thousands of I	of Dollars
Line			i i			S .
No		Item	Act	FY 1997	FY 1998	FY 1999 C
196	0305207F	Manned Reconnaissance Systems	7		11,360	Þ
197	0305906F	NCMC - TW/AA System	7	26,717	6,726	7,878 U
198	0305910F	SPACETRACK (SPACE)	7	32,794	38,432	39,532 U
199	0305911F	Defense Support Program (SPACE)	7	24,668	20,689	12,037 U
200	0305913F	NUDET Detection System (SPACE)	7	12,818	13,360	13,314 U
201	0305917F	Space Architect	7		13,480	13,714 U
202	0305953F	Evolved Expendable Launch Vehicle (EELV) (Space)	7			3,316 U
203	0308601F	Modeling and Simulation Support	7			1,093 U
204	0401119F	C-5 Airlift Squadrons	7	1,122	9,160	47,940 U
205	0401130F	C-17 Aircraft	7	71,365	104,568	123,069 U
206	0401214F	Air Cargo Material Handling (463-L) (Non-IF)	7	3,100	5,610	512 U
207	0401218F	KC-135s	7	714	1,863	11,093 U
208	0404102F	Aerospace Rescue and Recovery	7	3,165		D
209	0702207F	Depot Maintenance (Non-IF)	7	1,375	1,397	1,500 U
210	0708011F	Industrial Preparedness	7	48,615	45,020	50,997 U
211	0708026F	Productivity, Reliability, Availability,	7	15,856	21,764	970 U
212	0708071F	κi	7	13,780		16,086 U
213	0708611F	Support Systems Development	7	25,329	3,404	23,010 U
214	0804734F	Cryptologic/SIGINT-Related Skill Training	7	1,778	1,258	Ð
215	0901218F	Civilian Compensation Program	7	6,261	6,285	п 954'9

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Program Exhibit R-1	Date: FEB 1998	Thousands of Dollars	FY 1998 FY 199	7 3,548 U	7 5,975 24,091 U	6,410,667 6,551,341 6,839,032	14,089,834 13,982,255 13,598,093
FY 1999 RDT&E Program	Appropriation: 3600 F Research Development Test & Eval AF		Frogram Line Element No Number Item	216 1001004F International Activities	217 1001018F NATO Joint STARS	Operational Systems Development	Total Research Development Test & Eval AF

Page F-12

Defensewide FY 1999 RDT&E Program

Summary

T&E Program Exhibit R-1

Date: FEB 1998

		Thousands of Dollars	Dollars
	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities			
Basic Research Applied Research	329,469	326,202	338,393
Advanced Technology Development	2,070,700	2,164,209	1,726,555
Demonstration and Validation Engineering and Manufacturing Development	2,584,713	2,545,936	2,408,913
RDI&E Management Support	286,001	223,970	246,410
Operational Systems Development	2,195,458	2,298,726	2,289,442
Total Research Development Test & Eval Defwide	9,312,589	9,496,233	9,314,665
Summary Recap of FVDP Programs			
General Purpose Forces	26,575	26,853	28,143
Intelligence and Communications	2,007,774	2,074,151	2,052,347
Research and Development	7,128,310	7,183,982	7,015,692
Administration and Assoc Activities	2,198	32,348	34,392
Support of Other Nations			1,957
Special Operations Forces	141,631	152,886	155,903
Total Research Development Test & Eval Defwide	9,312,589	9,496,233	9,314,665

Defensewide FY 1999 RDT&E Program

360,890 3,178,940 1,407,556 2,039,722 40,504 69,495 128,042 155,903 336,365 63,277 418 9,314,665 FY 1999 Thousands of Dollars Date: FEB 1998 Exhibit R-1 3,281,730 1,588,611 2,040,819 284,550 50,804 53,976 52,934 152,886 344,722 FY 1998 9,496,233 155,959 3,360,278 1,569,611 2,069,971 141,631 301,792 214,511 78,039 38,520 62,668 -38,000 411 9,312,589 88,619 FY 1997 Summary Total Research Development Test & Eval Defwide Special Operations Command
Chemical and Biological Defense Program
National Imagery And Mapping Agency
Def Threat Red & Treaty Compln Agency
Ballistic Missile Defense Organization
Office of Secretary/Defense
Defense Advanced Research Projects Agcy
National Security Agency
Defense Special Weapons Agency
Defense Special Weapons Agency
Joint Chiefs of Staff Defense Information Systems Agency
Defense Intelligence Agency
Defense Logistics Agency
Defense Security Assistance Agency Summary Recap of Defensewide Defense Security Service Undistributed

Page D-II

Defensewide FY 1999 RDT&E Program

Page D-1

Defensewide FY 1999 RDT&E Program

Date: FEB 1998 Exhibit R-1

Appro	opriation: 0	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 1998	
i ! !		, , , , , , , , , , , , , , , , , , ,	! ! !	1	Thousands of Dollars	; { ! !
Line No	Program Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
19	0602715H	Defense Special Weapons Agency	2	186,726	203,642	D
20		0602787D8Z Medical Technology	2	7,981	8,669	9,239 U
21	0305108K	Command and Control Research	7	1,814	1,874	1,961 U
	Applied Research	search		1,130,113	1,280,559	1,401,820
22		0603002D8Z Medical Advanced Technology	Э	3,187	2,672	2,136 U
23	0603104D8Z	Explosives Demilitarization Technology	е	11,189	11,711	11,650 U
24	0603120D8Z Demining	Demining	٣	13,256	15,918	n
25		0603121D8Z Alternative to Landmines	ĸ		2,856	4,753 U
26		0603122D8Z Counterterror Technical Support	ю	24,599	38,036	35,813 U
27	0603160BR	Counterproliferation Support - Adv Dev	т			70,611 U
28		0603160D8Z Counterproliferation Support - Adv Dev	m	61,840	65,212	Ω
29	06031730	Support Technologies - Advanced Technology	т	248,011	299,788	166,676 U
30		0603225D8Z Joint DoD-DoE Munitions Technology Development	m	17,261	16,909	13,447 U
31	0603232D8Z	Automatic Target Recognition	т	4,391	6,487	5,081 U
32	0603384BP	Chemical and Biological Defense Program	ю	59,408	48,349	42,762 U
33	0603704D8Z	Special Technical Support	٣	16,785	11,224	11,337 U
34	0603711BR	Verification Technology Demonstration	ю			63,052 U
35	0603711H	Verification Technology Demonstration	٣	27,785	80,908	D
36	06037128	Generic Logistics R&D Technology Demonstrations	m	19,220	21,554	17,788 U

Page D-2

Defensewide FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 0400 D Research Development Test & Eval Defwide

!		1	; ; ;		Thousands of Dollars	
Line No	Program Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
37	0603716D8Z Strategic	Strategic Environmental Research Program	м	52,770	57,115	Þ
38	0603727D8Z	Joint Warfighting Program	٣		8,761	23,700 U
39		0603728D8Z Agile Port Demonstration	ю	4,500	4,778	Þ
40		0603729D8Z Rocket Launch Facility Upgrades	ю	9,433		Þ
41	. 0603730D8Z Airfield	Airfield Surface Traffic Monitoring	ю	1,382		Þ
42		0603738D8Z Cooperative DoD/VA Medical Research	ю	23,809	14,421	Þ
43	0603739E	Advanced Electronics Technologies	က	342,243	281,909	244,737 U
44	0603746E	Maritime Technology	ю	47,347	36,030	15,000 U
45	0603747E	Electric Vehicles	м	14,693	14,522	Þ
46	0603750D8Z	Advanced Concept Technology Demonstrations	ო	57,070	77,455	116,330 U
47	0603752D8Z	Commercial Technology Insertion Program	ĸ	6,500	19,105	Þ
48	06037538	Electronic Commerce Resource Centers	ო		46,421	Þ
49	0603755D8Z	High Performance Computing Modernization Program	м	119,092	143,176	140,927 U
20	0603760E	Command, Control and Communications Systems	ю	98,840	150,010	200,100 U
51	. 0603761E	Communication and Simulation Technology	ю	124,961	74,212	56,114 U
52	0603762E	Sensor and Guidance Technology	m	104,299	167,184	213,154 U
53	0603763E	Marine Technology	ю	41,185	19,626	24,788 U
54	1 0603764E	Land Warfare Technology	ო	62,381	80,924	108,490 U
55	603765E	Classified DARPA Programs	ю	172,895	129,411	55,500 U
26	0603800E	Joint Strike Fighter (JSF) - Dem/Val	m	70,261	23,019	n

Defensewide FY 1999 RDT&E Program

Exhibit R-1

φυ Þ 6,000 U 16,217 U 15,147 U 10,762 U 1,863 U 17,051 U 13,014 U FY 1999 969'04 31,792 3,436 497,752 1,726,555 190,446 Thousands of Dollars Date: FEB 1998 FY 1998 120,395 6,257 27,085 5,525 8,245 14,566 61,460 2,164,209 17,939 17,655 390,785 419,414 9,255 9,312 FY 1997 123,168 5,000 56,945 2,070,700 23,095 27,972 24,683 15,105 549,579 157,028 21,021 304,171 Act ო m က m m All Service Combat Identification Evaluation Team Theater High-Altitude Area Defense System - TMD 0603851D8Z Environmental Security Technical Certification Appropriation: 0400 D Research Development Test & Eval Defwide 0603832D8Z Joint Wargaming Simulation Management Office 0603714D8Z Advanced Sensor Applications Program Dual Use Applications Programs Dual Use Application Programs 0603790T NATO Research and Development 0603790D8Z NATO Research and Development 0603228D8Z Physical Security Equipment Global Grid Communications 0603709D8Z Joint Robotics Program 0603708D8Z Integrated Diagnostics Advanced Technology Development Special Development National Activities Navy Theater Wide 0603736D8Z CALS Initiative Navy Area 0603805E 06038058 0303132G 0304211G 0603857J 0305166G 0603861C 0603867C 06038680 Program Element Number Line 59 09 28 61 65 68 72 62 63 64 99 29 69 71 73 74 70

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Exhibit R-1

Defensewide FY 1999 RDI&E Program

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		FY 1999	43,027		950,473	176,846	96,915	190,147	50,676	22,113	60,404		17,234	086	2,618			2,408,913		125,312	11,307 U
Date: FEB 1998	Thousands of Dollars	FY 1998	46,144	15,766	941,142	582,000			•		53,413							2,545,936		126,302	
		FY 1997	58,825	22,755	811,416	493,429					45,133	48,736				1,198	-38,000	2,584,713	2,300	78,709	
		Act	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		2	S	Ŋ
Appropriation: 0400 D Research Development Test & Eval Defwide		Item	Meads Concepts - Dem/Val	Boost Phase Intercept Theater Missile Defense	National Missile Defense - Dem/Val	Joint Theater Missile Defense - Dem/Val	Family-of Systems Engineering and Integration	BMD Technical Operations	International Cooperative Programs	Threat and Countermeasures	P Chemical and Biological Defense Program - Dem/Val	8Z ASAT	0603920D8Z Humanitarian Demining	Technical Studies, Support and Analysis	Critical Technology Support	ISLAND SUN	Undistributed Adjustments	Demonstration and Validation	0604160D8Z Counterproliferation Support - EMD	P Chemical and Biological Defense Program - EMD	0604709D8Z Joint Robotics Program - Eng Dev
priation:		Line Element No Number	06038690	0603870C	0603871C	0603872C	06038730	0603874C	06038750	06038760	0603884BP	0603892D8Z ASAT	0603920D	0605104T	0605110T	0208043J	0904901U	Demonstra	0604160D	0604384BP	0604709D
Appro	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Line	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	_	90	91	92

Defensewide FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 0400 D Research Development Test & Eval Defwide

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	Program		į	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Thousands of	Dollars
Line						ט מ
No		Item	Act	FY 1997	FY 1998	FY 1999 C
93	0604764K	Advanced IT Services Joint Program Office (AITS-	Ŋ			15,588 U
94	0604771D8Z	Joint Tactical Information Distribution System	Ŋ	42,238	53,266	30,512 U
95	0604805D8Z	Commercial Operations and Support Savings	Ŋ			13,410 U
96	0604861C	Theater High-Altitude Area Defense System - TMD	Ŋ	66,737		323,942 U
97	0604865C	Patriot PAC-3 Theater Missile Defense Acquisition	Ŋ	382,808	198,273	137,265 U
86	0604867C	Navy Area Theater Missile Defense - EMD	ហ	143,343	278,790	245,796 U
	Engineerin	Engineering and Manufacturing Development		716,135	656,631	903,132
66		0603858D8Z Unexploded Ordnance Detection and Clearance	9			1,273 U
100		0604942D8Z Assessments and Evaluations	9		4,655	3,916 U
101	0605104D8Z	Technical Studies, Support and Analysis	9	29,583	29,178	30,021 U
102	0605110D8Z USD(A&T)-	USD(A&T)Critical Technology Support	9	2,608	2,584	D
103	0605114E	BLACK LIGHT	9	4,518	4,532	5,000 U
104	0605117D8Z	Foreign Material Acquisition and Exploitation	9	39,300	35,996	35,035 U
105	0605122D8Z	Industrial Capabilities Assessments	9			2,937 U
106	0605126J	Joint Theater Air and Missile Defense Organizatio	9		14,374	17,423 U
107	0605128BR	Classified Programs	9			13,755 U
108	0605128D8Z	Classified Program USD(P)	9	10,822	8,720	Þ
109	0605160BR	Counterproliferation Support	9			9,874 U
110		0605160D8Z Counterproliferation Support	9	8,346	6,768	D

UNCLASSIFIED

Defensewide FY 1999 RDI&E Program

Exhibit R-1

Appro	Appropriation: 0	0400 D Research Development Test & Eval Defwide			Date: FEB 19	1998
			; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		Thousands of Dollars	Dollars
Line	Frogram Element Number	Item	Act	199	FY 1998	1999
111	0605384BP	Chemical and Biological Defense Program	9	19,339	18,141	24,922 U
112	0605502D8Z	Small Business Innovative Research	9	26,667		D
113	0605502E	Small Business Innovative Research	9	45,660		D
114	0605710D8Z	Classified Programs - C3I	9	2,164	343	439 U
115	0605790D8Z	Small Business Innovation Research Administration	9	1,541	1,669	1,820 U
116	06057988	Defense Technology Analysis	9	13,096	8,542	5,010 U
117	0605801K	Defense Technical Information Services (DTIC)	9			46,469 U
118	06058018	Defense Technical Information Center	9	43,315	45,413	D
119	06058038	R&D in Support of DoD Enlistment, Testing	9	1,887	8,016	8,248 U
120	0605898E	Management Headquarters (Research and Development	9	35,340	35,039	38,611 U
121	0305190D8Z	2 C31 Intelligence Programs	9			1,657 U
122	0909900E	Financing for Expired Account Adjustments	9	1,815		Þ
	RDT&E Mana	RDT&E Management Support		286,001	223,970	246,410
123	0208045K	C3 Interoperability	7	24,391	24,913	26,296 U
124	0208052J	Joint Analytical Model Improvement Program	7	986	1,940	1,847 U
125	0301011G	Cryptologic Activities	7			
126	0301301L	General Defense Intelligence Program	7			
127	0302016K	National Military Command System-Wide Support	7	1,950	1,688	1,189 U
128	0302019K	Defense Info Infrastructure Engineering	7	4,531	4,119	4,975 U

Defensewide FY 1999 RDT&E Program

		Defensewide FY 1999 RDT&E Program	ewide E Progran	ď	Exhibit R-1	
Appr	Appropriation: 0	0400 D Research Development Test & Eval Defwide			Date: FEB 1998	86
 6	Program Element		į		Thousands of Dollars	
No		Item	Act	FY 1997	FY 1998	FY 1999 C
129	0303126K	Long-Haul Communications (DCS)	7	22,613	13,693	11,561 U
130	0303127K	Support of the National Communications System	7	3,808	4,405	4,428 U
131	0303129K	Defense Message System	7	1,353		D
132	0303131K	Minimum Essential Emergency Communications	7	2,208	2,242	3,061 U
133	0303140G	Information Systems Security Program	7	202,080	243,177	239,081 U
134	0303149J	C4I for the Warrior	7	2,502	2,506	2,819 U
135	0303149K	C4I for the Warrior	7			з,675 и
136	0303153K	Joint Spectrum Center	7			B,839 U
137	0304345BQ	National Imagery and Mapping Program	7			
138	0305102BQ	Defense Imagery and Mapping Program	7	101,988	115,468	114,417 U
139	0305127V	Foreign Counterintelligence Activities	7	411	406	418 U
140		0305154D8Z Defense Airborne Reconnaissance Program	7	454,411		n
141	0305154G	Defense Airborne Reconnaissance Program	7	3,459		D
142	03051591	Defense Reconnaissance Support Activities (SPACE)	7	78,039	50,804	40,504 U
143	0305188J	Joint C4ISR Battle Center (JBC)	7	2,829	2,808	D
144	0305190D8Z	C31 Intelligence Programs	7	6,767	5,978	8,015 U
145	0305204D8Z	Tactical Unmanned Aerial Vehicles	7		52,148	37,192 U
146	0305205D8Z	Endurance Unmanned Aerial Vehicles	7		184,380	178,668 U
147		0305206D8Z Airborne Reconnaissance Systems	7		188,445	162,666 U
148		0305207D8Z Manned Reconnaissance Systems	7		26,581	10,840 U

Page D-8

Defensewide FY 1999 RDT&E Program

Exhibit R-1	Date: FEB 1998
FY 1999 RDIGE Program	Appropriation: 0400 D Research Development Test & Eval Defwide

Appro	Appropriation: 0	0400 D Research Development Test & Eval Defwide			Date: FEB 1998	860
; ; ; ;	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ; ;		Thousands of Dollar	Dollars
a)	Program Element		•			
N O	Number	Item	Act	FY 1997	FY 1998	FY 1999 c
149	0305207G	Manned Reconnaissance Systems	7		4,256	4,085 U
150	0305208D8Z	Distributed Common Ground Systems	7		36,022	34,985 U
151	0305209D8Z	0305209D8Z DARP Integration and Support	7		7,216	15,701 U
152	0305884L	Intelligence Planning and Review Activities	7			
153	0305885G	Tactical Cryptologic Activities	7	99,987	92,660	104,510 U
154	0305889G	Counterdrug Intelligence Support	7	9,054		D
155	0305898L	Management Headquarters (Auxiliary Forces)	7	1,849	1,864	D
156	0708011S	Industrial Preparedness	7	6,101	26,013	26,231 U
157	0902298J	Management Headquarters (OJCS)	7	9,985	8,905	9,617 U
158	09027403	Joint Simulation System	7	21,020	23,443	24,775 U
159	2806666060	Financing for Cancelled Account Adjustments	7	7,378		D
160	1001017D8Z	Partnership for Peace Activities	7			1,957 U
161	1160279BB	Small Business Innovative Research/Small Bus Tech	7	3,017	3,147	D
162	1160401BB	Special Operations Technology Development	7	5,743	3,917	4,026 U
163	1160402BB	Special Operations Advanced Technology Developmen	7	7,536	8,140	8,020 U
164	1160404BB	Special Operations Tactical Systems Development	7	92,153	99,654	106,238 U
165	1160405BB	Special Operations Intelligence Systems	7	2,092	10,305	1,805 U
166	1160407BB	SOF Medical Technology Development	7	1,789	1,883	2,015 U
167	1160408BB	SOF Operational Enhancements	7	29,301	25,840	33,799 U
	Operational Systems	l Systems Development		2,195,458	2,298,726	2,289,442
Total		Research Development Test & Eval Defwide		9,312,589	9,496,233	9,314,665 Page D-9

Defensewide FY 1999 RDI&E Program

Exhibit R-1

	Summary		Date: FEB 1998	86
	ı		Thousands of Dollars	Dollars
		FY 1997	FY 1998	FY 1999
		1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1
Summary Recap of Budget Activities				
RDT&E Management Support		275,792	245,725	251,106
Total Developmental Test & Eval, Defense		275,792	245,725	251,106
Summary Recap of FYDP Programs				
Research and Development		275,792	245,725	251,106
Total Developmental Test & Eval, Defense		275,792	245,725	251,106

Page D-10

Defensewide FY 1999 RDT&E Program

SE Program Exhibit R-1

Thousands of Dollars е FY 1999 с 122,169 U 32,684 U 96,253 U 251,106 251,106 Date: FEB 1998 FY 1998 245,725 245,725 32,657 118,718 94,350 275,792 275,792 142,809 FY 1997 32,851 100,132 Act ဖ 9 Appropriation: 0450 D Developmental Test & Eval, Defense 1 0604940D8Z Central Test and Evaluation Investment 0605804D8Z Development Test and Evaluation 0605130D8Z Foreign Comparative Testing Total Developmental Test & Eval, Defense RDT&E Management Support Program Line Element No Number 7

Defensewide FY 1999 RDT&E Program

Exhibit R-1

Summary Recap of Budget Activities RDT&E Management Support Total Operational Test & Evaluation, Defense Summary Recap of FYDP Programs Research and Development		Summary		Date: FEB 1998	m
FY 1997 24,219 24,219 24,219		1		Thousands of Dollars	g
24,219 on, Defense 24,219		FY 15		FY 1998	FY 1999
24,219 on, Defense 24,219					1 1 1 1 1 1 1
24,219 Lation, Defense 24,219	Recap of Budget Activities				
lation, Defense 24,219	i	24,3		29,794	25,245
lation, Defense				11111111	:
	Operational Test & Evaluation, Defense	24,	219	29,794	25,245
	Recap of FYDP Programs				
	h and Development	24,7		29,794	25,245
Total Operational Test & Evaluation, Defense	Operational Test & Evaluation, Defense	24,		29,794	25,245

Page D-12

Defensewide FY 1999 RDT&E Program

Exhibit R-1

FY 1999 C 15,311 U 9,934 U 25,245 25,245 Thousands of Dollars Date: FEB 1998 FY 1998 16,154 13,640 29,794 29,794 24,219 FY 1997 11,437 12,782 24,219 Act 9 Appropriation: 0460 D Operational Test & Evaluation, Defense 1 0605118D8Z Operational Test and Evaluation Total Operational Test & Evaluation, Defense 2 0605131D8Z Live Fire Testing RDI&E Management Support Program Line Element No Number

Page D-13

Special Operations Command FY 1999 RDT&E Program

Exhibit R-1

Appro	opriation: 0	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 1998	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ;		Thousands of Dollars	Dollars
Line	Program Line Element No Number	Item	Act	997	FY 1998	FY 1999 C
161	161 1160279BB	Small Business Innovative Research/Small Bus Tech	7	3,017	3,147	n
162	1160401BB	Special Operations Technology Development	7	5,743	3,917	4,026 U
163	1160402BB	Special Operations Advanced Technology Developmen	7	7,536	8,140	8,020 υ
164	1160404BB	Special Operations Tactical Systems Development	7	92,153	99,654	106,238 U
165	1160405BB	Special Operations Intelligence Systems	7	2,092	10,305	1,805 U
166	1160407BB	SOF Medical Technology Development	7	1,789	1,883	2,015 U
167	1160408BB	SOF Operational Enhancements	7	29,301	25,840	33,799 U
	Operationa	Operational Systems Development		141,631	152,886	155,903
Total		Special Operations Command		141,631	152,886	155,903

Page D-14

Chemical and Biological Defense Program FY 1999 RDI&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 0400 D Research Development Test & Eval Defwide

1444	Appropriation: 0400 D Nese	Appropriation: 0400 D Nessaron Development lest & Eval Delwide			Date: FEB 1998	200
	Drogram		;		Thousands of	Dollars
Line		Item	Act	FY 1997	FY 1998	FY 1999 C
9	0601384BP	Chemical and Biological Defense Program	н	28,374	26,336	25,282 U
	Basic Research	arch		28,374	26,336	25,282
14	0602384BP	Chemical and Biological Defense Program	7	70,829	72,181	57,683 U
	Applied Research	search		70,829	72,181	57,683
32	0603384BP	Chemical and Biological Defense Program	ю	59,408	48,349	42,762 U
	Advanced Technology	echnology Development		59,408	48,349	42,762
83	0603884BP	Chemical and Biological Defense Program - Dem/Val	4	45,133	53,413	60,404 U
	Demonstrat	Demonstration and Validation		45,133	53,413	60,404
16	0604384BP	Chemical and Biological Defense Program - EMD	2	78,709	126,302	125,312 U
	Engineerin	Engineering and Manufacturing Development		78,709	126,302	125,312
111	0605384BP	Chemical and Biological Defense Program	9	19,339	18,141	24,922 U
	RDI&E Management	gement Support		19,339	18,141	24,922
Total		Chemical and Biological Defense Program		301,792	344,722	336,365

National Imagery And Mapping Agency FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Thousands of Dollars	Act FY 1997 FY 1998 FY 1999 C	7	7 101,988 115,468 114,417 U	
Appropriation: 0400 D Research Development Test & Eval Defwide	Program Line Element No Number Item	137 0304345BQ National Imagery and Mapping Program	138 0305102BQ Defense Imagery and Mapping Program	Operational Systems Development

Total National Imagery And Mapping Agency

Page D-16

Def Threat Red & Treaty Compln Agency FY 1999 RDT&E Program

Exhibit R-1

			•			
Appr	opriation: (Appropriation: 0400 D Research Development Test & Eval Defwide	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date: FEB 1998	860
•	Program		ļ		Thousands of Dollars	! !
Line No	Line Element No Number	Item	Act	FY 1997	FY 1998	FY 1999 C
18	0602715BR	0602715BR WMD Related Technologies	7		1 1 1 1 1 1 1 1	203,598 U
	Applied Research	search				203,598
27		0603160BR Counterproliferation Support - Adv Dev	ю			70,611 U
34		0603711BR Verification Technology Demonstration	m			63,052 U
	Advanced I	Advanced Technology Development			1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133,663
107		0605128BR Classified Programs	9			13,755 U
109		0605160BR Counterproliferation Support	9			9,874 U
	RDT&E Mana	RDT&E Management Support		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	23,629
Total		Def Threat Red & Treaty Compln Agency		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	360,890

Ballistic Missile Defense Organization FY 1999 RDT&E Program

Exhibit R-1

86	1	FY 1999 C	п 998′98	998'98	166,676 U	166,676	497,752 U	D	190,446 U	43,027 U	D	950,473 U	176,846 U	96,915 U	190,147 U	50,676 U	22,113 U	2,218,395	323,942 U	137,265 U
Date: FEB 1998	Thousands of Dollars	FY 1998	109,628	109,628	299,788	299,788	390,785		419,414	46,144	15,766	941,142	582,000					2,395,251		198,273
		FY 1997	122,176	122,176	248,011	248,011	549,579	157,028	304,171	58,825	22,755	811,416	493,429					2,397,203	66,737	382,808
	;	Act	7		ო		4	4	4	4	4	4	4	4	4	4	4		Ŋ	Z.
0400 D Research Development Test & Eval Defwide		Item	Support Technologies - Applied Research	kesearch	Support Technologies - Advanced Technology	Technology Development	Theater High-Altitude Area Defense System - TMD	Navy Area	Navy Theater Wide	Meads Concepts - Dem/Val	Boost Phase Intercept Theater Missile Defense	National Missile Defense - Dem/Val	Joint Theater Missile Defense - Dem/Val	Family-of Systems Engineering and Integration	BMD Technical Operations	International Cooperative Programs	Threat and Countermeasures	Demonstration and Validation	Theater High-Altitude Area Defense System - TMD	Patriot PAC-3 Theater Missile Defense Acquisition
Appropriation:	Drogram	Element Number	0602173C	Applied Research	06031730	Advanced	0603861C	0603867C	0603868C	06038690	0603870C	0603871C	0603872C	06038730	0603874C	06038750	0603876C	Demonstra	0604861C	0604865C
Appro	!	Line I	æ		29		72	73	74	75	76	77	78	79	80	81	82		96	97

Page D-18

Ballistic Missile Defense Organization FY 1999 RDT&E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Drod	۲ و		1		Thousands of Dollars	Dollars
Line Element No Number	er er	Item	Act	,	FY 1998	ெ
090 86	4867C	98 0604867C Navy Area Theater Missile Defense - EMD	MD 5	143,343	278,790	245,796 U
Eng	ineerin	Engineering and Manufacturing Development		592,888	477,063	707,003
Total Ba	llistic	Total Ballistic Missile Defense Organization		3,360,278	3,281,730	3,178,940

Office of Secretary/Defense FY 1999 RDT&E Program

Exhibit R-1 Date: FEB 1998

Appropriation: 0400 D Research Development Test & Eval Defwide

			6 1 1	Thousands of	of Dollars
Line		i			S
S O	Number Item	Act	FY 1997	FY 1998	e FY 1999 c
-	0601101088 Tarabase Tarabase	; ! :	; ; ; ; ; ;	1	
1	controlly in nouse Laboratory Independent Research	Н	3,074	1,513	2,173 U
m	0601103D8Z University Research Initiatives	н	208,656	222 628	* 000 910
4	0601105D8Z Gulf War Illness	H		0 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Ŋ	0601111D87 Government /Indiret	ı			19,646 U
•	contribut dovernment/industry Cosponsorship of University	н		7,393	9,870 U
	Basic Research		211,730	231,534	248.009
σ	0602227D8Z Medical Free Electron Laser	~	10 432		
10	0602228D8Z Historically Black Callega	1	704/01	ZU, 103	9,706 U
	officer	7	10,594	11,080	b
11	0602234D8Z Lincoln Laboratory Research Program	7	19,561	17,708	19.641 11
20	0602787D8Z Medical Technology	7	7,981	8,669	
				•	
	Applied Research			1 (
22	0603003000 Medical 11 11 11 11 11 11 11 11 11 11 11 11 11		996'/6	27,560	38,586
7 (cocycolog medical Advanced Technology	m	3,187	2,672	2,136 U
23	0603104D8Z Explosives Demilitarization Technology	я	11,189	11,711	11,650 п
24	0603120D8Z Demining	e	13,256	15,918	
25	0603121D8Z Alternative to Landmines	m			7
26	0603122D8Z Counterterror Technical Support	~	007 60		
28	0603160D87	,	660147	39,036	35,813 U
2 (vostovnos counterproliteration Support - Adv Dev	m	61,840	65,212	Þ
30	0603225D8Z Joint DoD-DoE Munitions Technology Development	ю	17,261	16,909	13.447 II
31	0603232D8Z Automatic Target Recognition	ю	4,391	6.487	E 180 5
33	0603704D8Z Special Technical Support	,			
		า	16,785	11,224	11,337 U

Page D-20

Office of Secretary/Defense FY 1999 RDT&E Program

Exhibit R-1	Date: FEB 1998	Thousands of Dollars
OIIICE OI SECIECALY/DETENSO FY 1999 RDI&E Program	Appropriation: 0400 D Research Development Test & Eval Defwide	

Appr	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 1998	86
:			. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Thousands of Dollars	Dollars
Line No	Program Element Number Item	Act	FY 1997	FY 1998	FY 1999 C
37	0603716D8Z Strategic Environmental Research Program	ю	52,770	57,115	D
38	0603727D8Z Joint Warfighting Program	ю		8,761	23,700 U
39	0603728D8Z Agile Port Demonstration	٣	4,500	4,778	D
40	0603729D8Z Rocket Launch Facility Upgrades	٣	9,433		D
41	0603730D8Z Airfield Surface Traffic Monitoring	ю	1,382		D
42	0603738D8Z Cooperative DoD/VA Medical Research	m	23,809	14,421	Þ
46	0603750D8Z Advanced Concept Technology Demonstrations	т	57,070	77,455	116,330 U
47	0603752D8Z Commercial Technology Insertion Program	m	9,500	19,105	n
49	0603755D8Z High Performance Computing Modernization Program	3	119,092	143,176	140,927 U
59	0603832D8Z Joint Wargaming Simulation Management Office	m	56,945	61,460	10,696 U
	Advanced Technology Development		487,009	558,296	435,870
63	0603228D8Z Physical Security Equipment	4	23,095	17,939	31,792 U
64	0603708D8Z Integrated Diagnostics	4	9,255	6,257	3,436 U
65	5 0603709D8Z Joint Robotics Program	4	27,972	27,085	16,217 U
99	o 603714D8Z Advanced Sensor Applications Program	4	24,683	17,655	15,147 U
67	7 0603736D8Z CALS Initiative	4	15,105	5,525	1,863 U
99	3 0603790D8Z NATO Research and Development	4	9,312	8,245	Ω
70) 0603851D8Z Environmental Security Technical Certification	4	21,021	14,566	17,051 U
84	1 0603892D8Z ASAT	4	48,736		D
85	5 0603920D8Z Humanitarian Demining	4			17,234 U
	Demonstration and Validation		179,179	97,272	102,740
					Page D-21

Office of Secretary/Defense FY 1999 RDT&E Program

Exhibit R-1

Appr	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 19	1998
	Gram		1 1 1		of Dollars
Line		1	: : : : : : : : : : : : : : : : : : : :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8
No	Item	Act	FY 1997	FY 1998	FY 1999 c
06	0604160D8Z Counterproliferation Support - EMD	Z.	2,300		b
92	0604709D8Z Joint Robotics Program - Eng Dev	22			11,307 U
94	0604771D82 Joint Tactical Information Distribution System	ហ	42,238	53,266	30,512 U
95	0604805D8Z Commercial Operations and Support Savings	S.			13,410 U
	Engineering and Manufacturing Development		44,538	53,266	55,229
66	0603858D8Z Unexploded Ordnance Detection and Clearance	9			1,273 U
100	0604942D8Z Assessments and Evaluations	9		4,655	3,916 U
101	0605104D8Z Technical Studies, Support and Analysis	9	29,583	29,178	30,021 U
102	0605110D8Z USD(A&T)Critical Technology Support	9	2,608	2,584	n
104	0605117D8Z Foreign Material Acquisition and Exploitation	9	39,300	35,996	35,035 U
105	0605122D8Z Industrial Capabilities Assessments	9			2,937 U
108	0605128D8Z Classified Program USD(P)	9	10,822	8,720	Þ
110	0605160D8Z Counterproliferation Support	9	8,346	6,768	D
112	0605502D8Z Small Business Innovative Research	9	26,667		b
114	0605710D8Z Classified Programs - C3I	9	2,164	343	439 U
115	0605790D8Z Small Business Innovation Research Administration	9	1,541	1,669	1,820 U
121	0305190D8Z C3I Intelligence Programs	9			1,657 U
	RDT&E Management Support		121,031	89,913	860'22
140	0305154D8Z Defense Airborne Reconnaissance Program	7	454,411		Þ

UNCLASSIFIED

Office of Secretary/Defense FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 0400 D Research Development Test & Eval Defwide

	Drogram		Thousands of Dollars	Thousands of Dollars	Dollars
Line		Act	FY 1997	FY 1998	FY 1999 C
144	0305190D8Z C3I Intelligence Programs	7	6,767	5,978	8,015 U
145	0305204D8Z Tactical Unmanned Aerial Vehicles	7		52,148	37,192 U
146	0305205D8Z Endurance Unmanned Aerial Vehicles	7		184,380	178,668 U
147	0305206D8Z Airborne Reconnaissance Systems	7		188,445	162,666 U
148	0305207D8Z Manned Reconnaissance Systems	7		26,581	10,840 U
150	0305208D8Z Distributed Common Ground Systems	7		36,022	34,985 U
151	0305209D8Z DARP Integration and Support	7		7,216	15,701 U
159	0909999D8Z Financing for Cancelled Account Adjustments	tments 7	7,378		D
160	1001017D8Z Partnership for Peace Activities	7			1,957 U
	Operational Systems Development		468,556	500,770	450,024
Total	Total Office of Secretary/Defense		1,569,611	1,588,611	1,407,556

UNCLASSIFIED

Defense Advanced Research Projects Agcy FY 1999 RDIGE Program

Exhibit R-1

Appr	Appropriation: (0400 D Research Development Test & Eval Defwide			Date: FEB 1998	86
					Thousands of Dollar	: : : : : : : :
T.ine	Flogram Element		1			o 4
No		Item	Act	FY 1997	FY 1998	FY 1999 C
			: :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	: : : : : : : : : : : : : : : : : : : :
7	0601101E	Defense Research Sciences	Т	89,365	68,332	65,102 U
				1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1
	Basic Research	earch		89,365	68,332	65,102
7	0602110E	Next Generation Internet	7		40,453	40,000 U
12	0602301E	Computing Systems and Communications Technology	7	304,766	309,037	417,723 U
13	0602383E	Biological Warfare Defense	2		60,805	88,000 U
15	0602702E	Tactical Technology	7	123,523	148,331	188,995 U
16	0602708E	Integrated Command and Control Technology	7	58,824	45,695	34,000 U
17	0602712E	Materials and Electronics Technology	7	203,887	231,353	244,408 U
	Applied Research	esearch		691,000	835,674	1,013,126
43	0603739E	Advanced Electronics Technologies	м	342,243	281,909	244,737 U
44	0603746E	Maritime Technology	m	47,347	36,030	15,000 U
45	0603747E	Electric Vehicles	m	14,693	14,522	D
50	0603760E	Command, Control and Communications Systems	m	98,840	150,010	200,100 U
51	0603761E	Communication and Simulation Technology	ო	124,961	74,212	56,114 U
52	0603762E	Sensor and Guidance Technology	m	104,299	167,184	213,154 U
53	0603763E	Marine Technology	ო	41,185	19,626	24,788 U
54	0603764E	Land Warfare Technology	m	62,381	80,924	108,490 U
52	0603765E	Classified DARPA Programs	m	172,895	129,411	55,500 U
56	0603800E	Joint Strike Fighter (JSF) - Dem/Val	ю	70,261	23,019	D

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Exhibit R-1 Defense Advanced Research Projects Agcy FY 1999 RDT&E Program

Appro	opriation:	Appropriation: 0400 D Research Development Test & Eval Defwide	,		Date: FEB 1998	861
	Dr.O.			•	Thousands of Dollars	i i
Line	Ficgram Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
57	57 0603805E	Dual Use Applications Programs	э	123,168	120,395	b
	Advanced	Advanced Technology Development		1,202,273	1,097,242	917,883
103	0605114E	BLACK LIGHT	9	4,518	4,532	5,000 U
113	0605502E	Small Business Innovative Research	9	45,660		Þ
120	0605898E	Management Headquarters (Research and Development	9	35,340	35,039	38,611 U
122	0909900E	Financing for Expired Account Adjustments	v	1,815		Þ
	RDT&E Man	RDT&E Management Support		87,333	39,571	43,611
Total	Defense	Total Defense Advanced Research Projects Agcy		2,069,971	2,040,819	2,039,722

National Security Agency FY 1999 RDT&E Program

Exhibit R-1

Date: FEB 1998 Appropriation: 0400 D Research Development Test & Eval Defwide

	í		1		Thousands of Dollars	Dollars
Line No	Program Line Element No Number	Item	Act	FY 199	FY 1998	FY 1999 C
09	03031326	Global Grid Communications	ю			
61	0304211G	National Activities	ю			
62	0305166G	Special Development	m			
	Advanced	Advanced Technology Development		21,994	11,651	5,913
125	0301011G	Cryptologic Activities	7			
133	0303140G	Information Systems Security Program	7	202,080	243,177	239,081 U
141	0305154G	Defense Airborne Reconnaissance Program	7	3,459		Þ
149	0305207G	Manned Reconnaissance Systems	7		4,256	4,085 U
153	0305885G	Tactical Cryptologic Activities	7	786'66	92,660	104,510 U
154	0305889G	Counterdrug Intelligence Support	7	9,054		Þ
	Operation	Operational Systems Development		1 1 1 1 1 1 1 1 1	1 1 1 1 1	i i i i i
Total	l National	National Security Agency		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	

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Defense Special Weapons Agency FY 1999 RDT&E Program

e FY 1999 c Thousands of Dollars Appropriation: 0400 D Research Development Test & Eval Defwide Þ D Exhibit R-1 284,550 FY 1998 203,642 806'08 80,908 203,642 214,511 186,726 27,785 27,785 FY 1997 186,726 Act ო 0603711H Verification Technology Demonstration Defense Special Weapons Agency Advanced Technology Development Total Defense Special Weapons Agency Applied Research 19 0602715H Program Line Element No Number 35

Defense Support Project Office FY 1999 RDT&E Program

Exhibit R-1

Appr	opriation: (Appropriation: 0400 D Research Development Test & Eval Defwide	1	1	Date: FEB 1998	
	Program			Thousands of Dollars	Thousands of Dollars	Dollars
Line	Element Number	Item	Act	FY 1997	FY 1998	FY 1999 C
142	142 0305159I	Defense Reconnaissance Support Activities (SPACE)	7	78,039	50,804	40,504 U
	Operation	Operational Systems Development		78,039	50,804	40,504
Tota	l Defense (Total Defense Support Project Office		78,039	50,804	40,504

Page D-28

Joint Chiefs of Staff FY 1999 RDT&E Program

FY 1999 c 17,423 U 1,847 U 24,775 U 13,014 U 2,819 U 9,617 U 17,423 39,058 69,495 13,014 Thousands of Dollars Date: FEB 1998 Exhibit R-1 1,940 FY 1998 14,374 2,506 2,808 8,905 14,374 23,443 39,602 FY 1997 1,198 986 2,502 2,829 9,985 37,322 1,198 21,020 Act 7 ^ 9 7 All Service Combat Identification Evaluation Team 4 0605126J Joint Theater Air and Missile Defense Organizatio Appropriation: 0400 D Research Development Test & Eval Defwide Joint Analytical Model Improvement Program Joint C4ISR Battle Center (JBC) Management Headquarters (OJCS) Joint Simulation System Operational Systems Development C4I for the Warrior Demonstration and Validation RDT&E Management Support ISLAND SUN 71 0603857J 02080523 0208043J 0902298J 0305188J 09027405 03031497 Program Line Element No Number 88 157 158 106 134 143

53,976

38,520

Total Joint Chiefs of Staff

Defense Information Systems Agency FY 1999 RDI&E Program

Exhibit R-1

	,	a e	FY 1999 c	1,961 U		1,961	15,588 U	15,588	46,469 U	46,469	26,296 U	1,189 U	4,975 U	11,561 U	4,428 U	D	3,061 U	3,675 U	в, 839 и	64,024	128,042
866	Dollars		FY	•	1		ਜ	 	4	1 4	2			н						1 40	12
Date: FEB 1998	Thousands of Dollar		FY 1998	1,874	;	1,874					24,913	1,688	4,119	13,693	4,405		2,242			51,060	52,934
Da	Tho		1		-			1		;										1	
			FY 1997	1,814	1	1,814		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			24,391	1,950	4,531	22,613	3,808	1,353	2,208			60,854	62,668
		; ! !	Act	7			Z.		ø		7	7	7	7	7	7	7	7	7		
			Item	Command and Control Research		esearch	Advanced IT Services Joint Program Office	Engineering and Manufacturing Development	Defense Technical Information Services (DTIC)	RDT&E Management Support	C3 Interoperability	National Military Command System-Wide Support	Defense Info Infrastructure Engineering and	Long-Haul Communications (DCS)	Support of the National Communications System	Defense Message System	Minimum Essential Emergency Communications	C4I for the Warrior	Joint Spectrum Center	al Systems Development	Defense Information Systems Agency
ion:	; ; ; ; ; ; ;	Program Element	Number	0305108K		Applied Research	0604764K	Engineeri	0605801K	RDT&E Man	0208045K	0302016K	0302019K	0303126K	0303127K	0303129K	0303131K	0303149K	0303153K	Operational	
Approp	1 1 1 1 1 1 1 1 5 5 5	T.ine E		21			93		117		123	127	128	129	130	131	132	135	136		Total

Page D-30

Defense Intelligence Agency FY 1999 RDI&E Program

	Program	
Thousands of Dollars	1	
Date: FEB 1998	Appropriation: 0400 D Research Development Test & Eval Defwide	
Exhibit R-1	FY 1999 RDIGE Program	

	Drogram		1	1	Thousands of Dollars	
Line No	Element Number	Item	Act	FY	1997 FY 1998 FY 1	FY 1999 C
126	126 0301301L	General Defense Intelligence Program	7			
152	152 0305884L	Intelligence Planning and Review Activities	7			
155	155 0305898L	Management Headquarters (Auxiliary Forces)	7	1,849	1,864	n
	Operational Systems	l Systems Development		:	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	. Defense I	Total Defense Intelligence Agency		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

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Exhibit R-1

Appro	priation:	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 1998	86
1 1	Program				Thousands of Dollars	Dollars
Line No	Line Element No Number	Item	Act	FY 1997	FY 1998	EY 1999 C
36	06037128	Generic Logistics R&D Technology Demonstrations	ю	19,220	21,554	17,788 U
48	06037538	Electronic Commerce Resource Centers	က		46,421	D
58	06038058	Dual Use Application Programs	ĸ	5,000		000'9
	Advanced	Technology Development		24,220	67,975	23,788
116	06057988	Defense Technology Analysis	9	13,096	8,542	5,010 U
118	06058018	Defense Technical Information Center	9	43,315	45,413	D
119	06058038	R&D in Support of DoD Enlistment, Testing	9	1,887	8,016	8,248 U
	RDT&E Mai	RDT&E Management Support		58,298	61,971	13,258
156	07080118	Industrial Preparedness	7	6,101	26,013	26,231 U
	Operation	Operational Systems Development		6,101	26,013	26,231
Total		Defense Logistics Agency		88,619	155,959	63,277

Page D-32

Defense Security Assistance Agency FY 1999 RDT&E Program

Exhibit R-1

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Appro	opriation: 0	Appropriation: 0400 D Research Development Test & Eval Defwide			Date: FEB 1998	868
! !	1 1 1 1 1 1 1 1				Thousands of Dollars	Dollars
	Program		:			S
Line No	Line Element No Number	Item	Act	FY 1997	FY 1998	e FY 1999 c
			:	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
69	0603790T	NATO Research and Development	4			10,762 U
98	0605104T	Technical Studies, Support and Analysis	4			D 086
87	0605110T	Critical Technology Support	4			2,618 U
	Demonstrat	Demonstration and Validation		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14,360
Tota]	l Defense S	Total Defense Security Assistance Agency			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14,360

Undistributed FY 1999 RDT&E Program

Exhibit R-1

Appr	Appropriation: 0400 D Resea				Date: FEB 1998	866
: ! !		Thousands of Dollars	 		Thousands of Dollars	Dollars
Line	Program Element		i	S) ()	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S
No	Number	Item	Act	FY 1997	FY 1998	FY 1999 C
			:	1 1 2 2 1 1 1 1 1 1	: : : : : : : : : : : : : : : : : : : :	
68	0904901U	Undistributed Adjustments	4	-38,000		n
				1 1 1	1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Demonstrat	Demonstration and Validation		-38,000		
Tota	Total Undistributed	uted				1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1				0000		

Exhibit R-1 Defense Security Service FY 1999 RDT&E Program

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866	Dollars	FY 1999	418	418	418
Date: FEB 1998	Thousands of Dollars	FY 1998	406	406	406
	Thousands of Dollars	FY 1997	411	411	411
1		Act	7		
Appropriation: 0400 D Research Development Test & Eval Defwide		Item	V Foreign Counterintelligence Activities	Operational Systems Development	Total Defense Security Service
priation:		Frogram Line Element No Number	139 0305127V	Operation	Defense
Appro	! !	Line	139		Total